

# IT Channel

Product Catalogue 2022



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## **Grow your Business!**

Your end users can't afford for their critical infrastructure to go down. At Vertiv, we have built our capabilities on delivering reliable facilities and IT Infrastructure solutions that assure business-critical continuity.

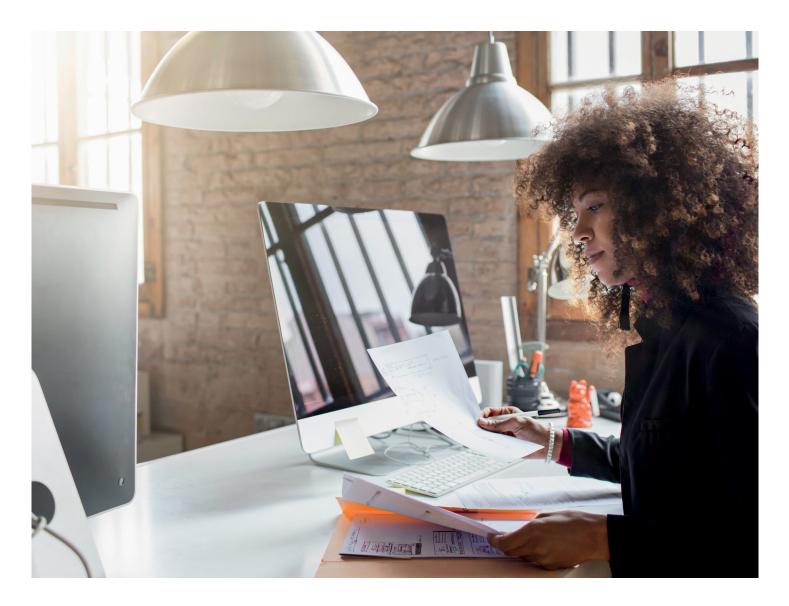
#### What can Vertiv's portfolio bring to end users?

Optimisation of their critical infrastructure - we, as Vertiv, promise to **maximise the availability, capacity and efficiency of their** critical infrastructure.

We can provide the ideal and complete solution for their business: our product range brings together everything you need in order to have their business up and running at any moment, and at the same time supply quicker and easier access to the infrastructure.

Vertiv provides hardware and software products that offer a complete solution for infrastructure management and, besides having all these products under one roof, we also have the right people you need: **IT experts, sales consultants and technical support teams** - an entire team focused on the challenges brought by your customer.

Therefore, if your clients are looking to optimise their infrastructure by investing in one organisation, rest assured that Vertiv is a sound choice.



# **Channel Benefits**



# The Most Comprehensive Provider of High-Quality Integrated Rack and IT Solutions



Product Type	Vertiv
Environmental Monitoring	<ul> <li></li> </ul>
Racks	× .
PDUs	$\checkmark$
IT Management	$\checkmark$
Rack Management Software	$\checkmark$
Serial Consoles	$\checkmark$
KVM & Displays	$\checkmark$
Out-of-Band w/ Cellular	$\checkmark$
UPS / Backup Power	$\checkmark$
Cooling	$\checkmark$
Comprehensive Service	$\checkmark$
OEM Remote Monitoring (LIFE)	$\checkmark$

Rack Product	Benefit
VR Rack	The Vertiv rack with all the flexibility you need for an easy installation.
Liebert™ GXT5 Lithium Ion	UPS Uninterruptable Power Supply unit with new Lithium-Ion battery technology to maintain power to the rack IT in all circumstances
Liebert™ CRV	Rack cooling solution to keep the rack IT equipment within operational temperatures with minimal footprint and high efficiency
Geist™ rPDU	Provide reliable power distribution to critical rack IT equipment with wide variety of supported receptables and monitoring
Avocent <sup>®</sup> Ecosystem	Vertiv's powerful solution portfolio to locally or remotely access and manage all your attached IT devices.
Service	Vertiv's service offering ensures that systems remain continuously available and with reduced costs.



#### Vertiv<sup>™</sup> Partner Program

Join the Vertiv Partner Program. Provide More Solutions. Gain Unparalleled Support. Maximise Your Profits.

**Register or Login here:** 

Partners.Vertiv.com

#### Vertiv Incentive Program (VIP):

Vertiv resellers now can earn additional rewards each time they sell.

Vertiv Incentive Program

# Sell, Earn, Repeat.

More info: Vertiv-VIP.com

#### **Channel Product Selector**

UPS, Accessories, PDU, Rack, Monitoring: use our tool to determine the best possible solution and share it with selected distributors. Available in 7 languages and as a mobile app.

https://www.vertiv.com/en-emea/Interactive-Product-Selector

#### **Tech Support**

Our Commitment to your daily Business, provided by our World Wide Tech support available in 5 Languages (GB, ES, FR, IT, DE). <a href="mailto:support.smallups.pdu@vertiv.com">support.smallups.pdu@vertiv.com</a>

#### Liebert Technical Support:

Toll-free 00-80011554499 - Toll +39 02 98250222

liebert.upstech@vertiv.com

Vertiv Avocent Customer Care: support.Avocent@vertiv.com https://www.vertiv.com/en-emea/Avocent-Support-Contacts

#### **EMEA Channel Support**

In case of questions about the Vertiv Partner Program, available incentives or promotions or to find the right sales contact for your region, please reach out to **EMEA.PartnerMarketing@vertiv.com**.

We are more than happy to help!



# **Vertiv Foundation**

Simplifies the customer buying journey into one solution with help from our expert tools.

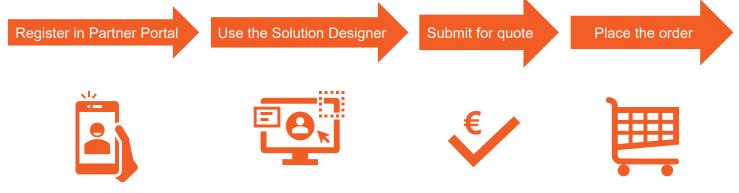
Check out our Solution Builder



# **The Customer Journey**

Simplifies, integrates, and accelerates the customer buying journey for all our IRS products into one solution.

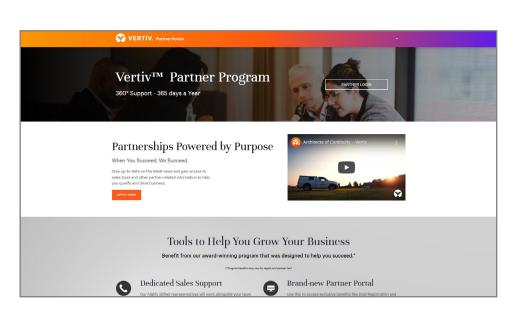
#### How to use the Vertiv Foundation:



#### 1. Register in Partner Portal

#### **Registration Benefits:**

- Vertiv knows who the partner is
- Deals can be registered
- Easy access to tech support
- Attractive price discount
- Information about latest promotions, offers and product launches



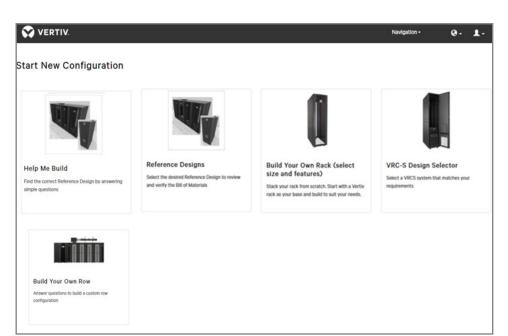


Design in the way that suits the Partner's expertise and solution knowledge

#### Choose from:

- Help Me Build
- Reference Design
- Build Your Own Rack
- Build Your Own Row

## Vertiv Solution Designer





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## 3. Submit the Solution Design for the Quotation

#### **Submission Benefits:**

- Design check by Vertiv Technical Experts
- Attractive price discounts
- Lead time certainty





# 4. Place the Order

#### **Order Benefits:**

- Peace of Mind with a high quality Vertiv rack solution
- Peace of Mind with Vertiv services and support
- Peace of Mind with Vertiv configuration and installation expertise

# **Uninterruptible Power Supplies (UPS)**

Vertiv delivers a full range of uninterruptible power supplies (UPS) and power distribution units (PDU), from individual data centre solutions to integrated systems that keep network closets, computer rooms and data centre infrastructure up and running.

This wide range of power capacities will bring you not only greater margins but also significant upselling opportunities.



# Three-Phase UPS Liebert® EXS Liebert® ITA2



# Further enterprise UPS solutions from Vertiv

Vertiv also offers a complete range of efficient, reliable Three-phase UPS systems with up to 60 KVA that can be configured to meet the specific needs of your customers critical applications.

For more information on our Three-phase UPS portfolio or your individual project support please contact your Vertiv Channel Account Manager or email us at <u>UKIE.channel@vertivco.com</u>.

You can also find more information on our Website Vertiv.com.



#### Three-Phase UPS Liebert<sup>®</sup> EXS



#### Optimised and Integrated Three-Phase UPS Solution with High Efficiency Power Protection

10000-15000-20000-30000-40000-60000 VA

#### **Key Benefits**

- Output power factor up to 1
- Double conversion efficiency up to 96.2%
- ECO mode efficiency up to 99%
- Input current total harmonic distortion correction (THDi) < 3%</li>
- Battery charger up to 13 A
- Integrated manual bypass
- Integrated input and output breakers/switches
- Integrated parallel load bus and synchronisation port (LBS)

#### Applications

- Banking, Financial and Insurance
- Data Centre/Colocation/Hosting
- Government
- Manufacturing
- Healthcare
- Transportation
- Retail and Wholesale

Technology:	Double-Conversion, VFI-SS-111 according to IEC62040-3
Connections:	Three-phase or Single-phase output connection (single-phase output for 10-20kVA only), Power cables connection from the rear
<b>Communications:</b>	USB port, SNMP/WEB, Modbus and Relay Card optional, Vertiv Life™ Services compatible
Options:	Multiple internal battery configurations, External Battery Cabinets, Battery shelves, Battery temperature compensation kit, Parallel and Dual Bus cables, Communication cards

Part Number	Name	Rating	Battery configuration	Dimensions WxDxH	Weight
ITC101A0100A00A	Liebert EXS 10kVA 0MIN autonomy	10 kVA/kW	N.A.	335 x 650 x 1300 mm	85 kg
ITC101C0110A00A	Liebert EXS 10kVA 11MIN autonomy	10 kVA/kW	10y 1x32x9Ah	335 x 650 x 1300 mm	185 kg
ITC101C0120A00A	Liebert EXS 10kVA 28MIN autonomy	10 kVA/kW	10y 2x32x9Ah	335 x 650 x 1300 mm	285 kg
ITC151A0100A00A	Liebert EXS 15kVA OMIN autonomy	15 kVA/kW	N.A.	335 x 650 x 1300 mm	85 kg
ITC151C0110A00A	Liebert EXS 15kVA 6MIN autonomy	15 kVA/kW	10y 1x32x9Ah	335 x 650 x 1300 mm	185 kg
ITC151C0120A00A	Liebert EXS 15kVA 17MIN autonomy	15 kVA/kW	10y 2x32x9Ah	335 x 650 x 1300 mm	285 kg
ITC201A0100A00A	Liebert EXS 20kVA 0MIN autonomy	20 kVA/kW	N.A.	335 x 650 x 1300 mm	85 kg
ITC201C0110A00A	Liebert EXS 20kVA 6MIN autonomy	20 kVA/kW	10y 1x32x9Ah	335 x 650 x 1300 mm	185 kg
ITC201C0120A00A	Liebert EXS 20kVA 11MIN autonomy	20 kVA/kW	10y 2x32x9Ah	335 x 650 x 1300 mm	285 kg
ITC301A0101A00A	Liebert EXS 30kVA 0MIN autonomy	30 kVA/kW	N.A.	440 x 750 x 1600 mm	200 kg
ITC301C0121A00A	Liebert EXS 30kVA 6MIN autonomy	30 kVA/kW	10y 2x32x9Ah	440 x 750 x 1600 mm	400 kg
ITC301C0141A00A	Liebert EXS 30kVA 14MIN autonomy	30 kVA/kW	10y 4x32x9Ah	440 x 750 x 1600 mm	600 kg
ITC401A0101A00A	Liebert EXS 40kVA 0MIN autonomy	40 kVA/kW	N.A.	440 x 750 x 1600 mm	200 kg
ITC401C0131A00A	Liebert EXS 40kVA 7MIN autonomy	40 kVA/kW	10y 3x32x9Ah	440 x 750 x 1600 mm	500 kg
ITC401C0161A00A	Liebert EXS 40kVA 15MIN autonomy	40 kVA/kW	10y 4x40x9Ah	440 x 750 x 1600 mm	600 kg
ITC601A0101A00A	Liebert EXS 60kVA 0MIN autonomy	60 kVA/kW	N.A.	600 x 850 x 1600 mm	215 kg
ITC601C0151A00A	Liebert EXS 60kVA 6MIN autonomy	60 kVA/kW	10y 1x32x34Ah	600 x 850 x 1600 mm	615 kg
ITC601C0171A00A	Liebert EXS 60kVA 8MIN autonomy	60 kVA/kW	10y 1x40x34Ah	600 x 850 x 1600 mm	715 kg

\*The battery runtime is indicative and is meant for new and fully charged batteries



## Three-Phase UPS Liebert<sup>®</sup> ITA2



# Remarkable Efficiency and Flexibility Characterise the Liebert<sup>®</sup> ITA2 UPS Family

10000-15000-20000 VA

#### **Key Benefits**

- Rack-tower design for installation flexibility
- Able to deliver both three-phase and single-phase output
- Ultra-high power density
- 0.99 input power factor for better grid or generator compatibility
- Unity output power factor for additional power availability
- Efficiency in double conversion up to 96.2%
- ECO mode operation with efficiency up to 99% and remarkable energy saving performance
- Powerful charging capability with consequent reduction of the battery recharging time
- Programmable dry contacts
- Programmable output power terminals

#### Applications

- Small computer rooms
- Branch offices
- Servers
- Network computers and peripherals
- Storage device
- VoIP

Technology:	Double-Conversion, VFI-SS-111 according to IEC62040-3
Connections:	Three -phase or Single-phase output connection, Terminal block on the back of UPS
<b>Communications:</b>	USB port, SNMP/WEB, Modbus and Relay Card optional, Vertiv Llife™ Services compatible
Options:	Battery Module, Power Distribution Module, Parallel and Dual Bus cables,
	Rack installation kit, Battery temperature compensation kit, Intellislot extender

PN	Description	Rating	Battery configuration	Dimensions WxDxH	Weight
ITA210101000A00	Liebert ITA2 10kVA Rack-UPS with POD 0MIN autonomy	10 kVA/kW	N.A.	430 x 500 x 305 mm	41 kg
ITA210121000A00	Liebert ITA2 10kVA Rack-UPS with POD 12MIN autonomy	10 kVA/kW	5y 1x32x9Ah	430 x 500 x 565 mm	143 kg
ITA210141000A00	Liebert ITA2 10kVA Rack-UPS with POD 30MIN autonomy	10 kVA/kW	5y 2x32x9Ah	430 x 500 x 825 mm	245 kg
ITA215101000A00	Liebert ITA2 15kVA Rack-UPS with POD OMIN autonomy	15 kVA/kW	N.A.	430 x 500 x 305 mm	41 kg
ITA215141000A00	Liebert ITA2 15kVA Rack-UPS with POD 18MIN autonomy	15 kVA/kW	5y 2x32x9Ah	430 x 500 x 825 mm	245 kg
ITA215161000A00	Liebert ITA2 15kVA Rack-UPS with POD 30MIN autonomy	15 kVA/kW	5y 3x32x9Ah	430 x 500 x 1085 mm	347 kg
ITA220101000A00	Liebert ITA2 20kVA Rack-UPS with POD 0MIN autonomy	20 kVA/kW	N.A.	430 x 500 x 305 mm	41 kg
ITA220141000A00	Liebert ITA2 20kVA Rack-UPS with POD 12MIN autonomy	20 kVA/kW	5y 2x32x9Ah	430 x 500 x 825 mm	245 kg
ITA220181000A00	Liebert ITA2 20kVA Rack-UPS with POD 30MIN autonomy	20 kVA/kW	5y 4x32x9Ah	430 x 500 x 1345 mm	449 kg

\* The battery runtime is indicative and is meant for new and fully charged batteries

# **Integrated Rack Solutions**

Optimising technology and performance needs for IT applications. Our integrated platform provides standard and specific, custom solutions.

Our family of racks enables cable management, power distribution, ventilation or sophisticated precision air conditioning solutions. Each of our products meets the strictest standards for durability and safety. Contact the Vertiv team for modular designs for data centres of any type or dimensions.



# **Single Phase UPS**

The critical systems that sustain your business operations can't go down.

Vertiv supports you in improving your uptime with a full range of innovative Liebert<sup>®</sup> uninterruptible power supplies (UPS) and future-proof, integrated UPS systems, that will cover the backup power needs of your IT infrastructure, from small computer rooms at the network edge to enterprise and hyperscale data centres. Discover the best uninterruptible supplies to protect your application.

# Single Phase UPS

Liebert<sup>®</sup> GXT5

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#### **Intelligent and Efficient UPS Protection**

750VA - 20kVA

#### **Key Benefits**

- High output PF=1.0
- Full color graphic LCD display with gravity sensing
- Controllable output power sockets
- External battery cabinets with auto-detection
- Integrated POD and maintenance bypass (detachable, standard for small line only from 5-10kVA)
- Wide range of power ratings to answer any possible power requirement
- Extreme flexibility with parallel or redundant operation capability
- Battery health status and replacement date prediction

- Remote management, update and configuration
- Optimised thermal management and variable speed fan
- High efficiency up to 95% in on-line mode
- Even higher efficiency up to 98% in Active ECO mode
- Programmable output sockets for optimum battery usage

#### Applications

- Business and Education Communications & Network systems
- Communications and DAS
- Network/Wiring Closets
- Edge Processing Retail, Finance, Education

Technology:	Online Double Conversion, VFI according to IEC62040-3
Connections:	Terminal block (input and output) + IEC plugs (output only)
Communications:	SNMP/WEB, Modbus and Relay Card optional, Vertiv Life™ Services compatible Battery Cabinets
Options:	Communication cards, Rack mount kits, Warranty extensions available

Model	Power Rating	Runtime*	Outputs Outlets	Dimensions WxDxH	Weight	Warranty Extension +1Y	Warranty Extension +3Y
GXT5-750IRT2UXLE	750 VA / 750 W	21,5 min	8 (C13)	430 x 400 x 85	21 kg	PF1YR-MU-13	PF3YR-MU-13
GXT5-1000IRT2UXLE	1000 VA / 1000 W	15 min	8 (C13)	430 x 400 x 85	21 kg	PF1YR-MU-13	PF3YR-MU-13
GXT5-1500IRT2UXLE	1500 VA / 1500 W	16 min	8 (C13)	430 x 470 x 85	21 kg	PF1YR-MU-14	PF3YR-MU-14
GXT5-2000IRT2UXLE	2000 VA / 2000 W	9 min	8 (C13)	430 x 470 x 85	21 kg	PF1YR-MU-14	PF3YR-MU-14
GXT5-3000IRT2UXLE	3000 VA / 3000 W	9 min	1(C19) 6 (C13)	430 x 540 x 85	28,2 kg	PF1YR-MU-15	PF3YR-MU-15
GXT5-5000IRT5UXLE	5000 VA / 5000 W	18.5 min	Hardwire, 2 (C19), 6 (C13)	430 × 630 × 217	70.8 kg	PF1YR-MU-09	PF3YR-MU-09
GXT5-6000IRT5UXLE	6000 VA / 6000 W	14.5 min	Hardwire, 2 (C19), 6 (C13)	430 × 630 × 217	70.8 kg	PF1YR-MU-10	PF3YR-MU-10
GXT5-8000IRT5UXLE	8000 VA / 8000 W	9.5 min	Hardwire, 4 (C19), 4(C13)	430 × 630 × 217	70.8 kg	PF1YR-MU-11	PF3YR-MU-11
GXT5-10KIRT5UXLN	10000 VA / 10000 W	7 min	Hardwire, 4 (C19), 4(C13)	430 × 630 × 217	70.8 kg	PF1YR-MU-12	PF3YR-MU-12
GXT5-16KIRT9UXLE	16000 VA / 16000 W	9,5 min	Hardwire	430×630×394	135 kg	PF1YR-MU-16	PF3YR-MU-16
GXT5-20KIRT9UXLE	20000 VA / 20000 W	7 min	Hardwire	430×630×394	135 kg	PF1YR-MU-17	PF3YR-MU-17
External Battery Cabin	ets:						
GXT5-EBC36VRT2UE (for 7	750VA , 1000VA)			430x630x261	112 kg		
GXT5-EBC48VRT2UE (for 1	500VA , 2000VA)			430 x 370 x 85	21 kg	-	-
GXT5-EBC72VRT2UE (for 3	8000VA)			430 x 497 x 85	28,5 kg	-	-
GXT5-EBC192VRT3UE (for 5 - 10kVA)		430 x 602 x 85	39 kg	-	-		
GXT5-EBC384VRT6U (for 16 and 20kVA)			430 x 630 x 130	57,6 kg	-	-	
RDU101 SNMP-Communication card							



### Vertiv<sup>™</sup> Maintenance Bypass Cabinet Option

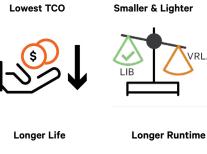
Integrated lock out/tag out arm for maximum site and personnel safety.

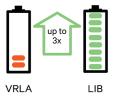


MBC Model Number	Dimensions	Input	Compatible UPS
VMBC-20KIRT4U	430W x 550D x 173H (mm)	L-L-L-N-G	GXT5-16KIRT9UXLE GXT5-20KIRT9UXLE

# Vertiv<sup>™</sup> Liebert<sup>®</sup> GXT5 **Lithium-Ion UPS** 1000 - 3000 VA, 230V







Lithium-ion technology delivers two to three times the useful life of lead-acid batteries along with a lower total cost of ownership, making the Liebert® GXT5 Lithium-Ion online UPS ideally suited for network and server rooms, and other mission-critical edge applications.

#### **Key Benefits**

- Lowest total cost of ownership; lithium-ion batteries last up to 3 times as long as VRLA batteries
- 5-years standard warranty on the UPS and batteries
- High efficiency, up to 95% in doubleconversion online mode to deliver energy savings
- Advanced User-Friendly Color Graphic LCD with gravity sensing orientation for simple local UPS configuration and management
- Flexible 2U rack/tower convertible form factor
- Hot-swappable, user-replaceable internal batteries enable battery replacement without disrupting power to connected equipment

- USB communications for local UPS monitoring and management using free Power Assist software
- Optional Liebert<sup>®</sup> IntelliSlot RDU101 • network communications card for remote monitoring, control and management of the UPS
- Environmentally Friendly; RoHS and **REACH** compliant

#### Applications

- **Education Healthcare**
- Retail and Wholesale
- Government
- Banking, Financial and Insurance

## **Technical Specifications**

Model	Power Rating	Input Voltage	O utput Voltage	Efficiency	Height	Width	Depth	Weight
GXT5LI-1000IRT2UXL	1000VA / 1000W	Nominal (Full Load): 176-288 VAC; Max: 115-288 VaC	230VAC; 200/208/220/230/240 VAC (User-Configurable)	Up to 95% in online mode; 98% in Active ECO Mode	85 mm	430 mm	446 mm	16 kg
GXT5LI-1500IRT2UXL	1500VA / 1500W	Nominal (Full Load): 176-288 VAC; Max: 115-288 VaC	230VAC; 200/208/220/230/240 VAC (User-Configurable)	Up to 95% in online mode; 98% in Active ECO Mode	88 mm	430 mm	476 mm	17 kg
GXT5LI-2000IRT2UXL	2000VA / 2000W	Nominal (Full Load): 176-288 VAC; Max: 115-288 VaC	230VAC; 200/208/220/230/240 VAC (User-Configurable)	Up to 95% in online mode; 98% in Active ECO Mode	85 mm	430 mm	476 mm	17 kg
GXT5LI-3000IRT2UXL	3000VA / 2700W	Nominal (Full Load): 176-288 VAC; Max: 115-288 VaC	230VAC; 200/208/220/230/240 VAC (User-Configurable)	Up to 95% in online mode; 98% in Active ECO Mode	85 mm	430 mm	546 mm	21 kg

# Single Phase UPS

## Single Phase UPS

Vertiv<sup>™</sup> Edge Lithium-Ion UPS, 1500-3000VA



The Vertiv<sup>™</sup> Edge Lithium-Ion line interactive UPS provides both power conditioning and battery backup to critical IT equipment such as servers and network gear ensuring your customers' business-critical applications are protected in the event of an unanticipated loss of power or an unprecedented power surge.

#### **Key Benefits**

- Lowest total cost of ownership
- Lithium-ion batteries last up to 3 times as long as VRLA batteries, resulting in fewer battery replacements
- 5-years standard warranty on the UPS and batteries
- Longer battery runtime and quicker battery recharge times

#### Applications

- Education Healthcare Retail and Wholesale Government Banking
- Financial and Insurance



## **Technical Specifications**

Model	Power Rating	Input Voltage	Output Voltage	Efficiency	Wiring	Height	Width	Depth	Weight
EDGELI-1500IRT2U	1500VA / 1350W	230V AC	200/208/220/230(default)/ 240VAC; User configurable	Up to 97.5%	Input: IEC C14 Output: 3+3 x IEC C13	88 mm	438 mm	410 mm	12.8 kg
EDGELI-2200IRT2U	2200VA / 1980W	230V AC	200/208/220/230(default)/ 240VAC; User configurable	Up to 98%	Input: IEC C20 Output: 3+3 x IEC C13 & 1 x IEC C19	88 mm	438 mm	510 mm	17.5 kg
EDGELI-3000IRT2U	3000VA / 2700W	230V AC	200/208/220/230(default)/ 240VAC; User configurable	Up to 98%	Input: IEC C20 Output: 3+3 x IEC C13 & 1 x IE C19	88 mm	438 mm	630 mm	24.3 kg



## Vertiv Edge Single Phase UPS



#### **Superior Power Protection for Edge Applications**

500 - 3000 VA 230 V

#### **Key Benefits**

- Line interactive (VI) UPS technology for professional applications
- Complete product family with ratings from 500 VA up to 3 kVA
- High output power factor (0.9)
- Controllable sockets for load management during outages
- Installation Flexibility with 1U, 2U, 3U and tower form factor versions
- Colour LCD display
- Same external battery cabinets compatible with Vertiv™ GXT5
- Railkits included in the UPS
- Up to 30% more runtime like competitive units
- Easy integration in management tools via SNMP, Modbus, BACNET, dry-contacts
- Battery deep discharge protection for extended battery life
- Configurable "Green function" to disable output at small loads

#### Applications

- Banking, Financial and Insurance
- Broadcast and Entertainment
- Education
- Fire/Alarm/Security
- Government
- Healthcare
- Manufacturing
- Retail and Wholesale
- Telecom

39 kg

• Transportation

## **Technical Specifications**

Model	Power Rating	Runtime (50% load)	Output Outlets	Dimensions	Unit Weight	Warranty Extension 1Y	Warranty Extension 3Y
EDGE-750IMT	750VA / 675W	17 min	5 (C13)	145 x 370 x 220 mm	11,2 kg	PF1YR-MU-18	PF3YR-MU-18
EDGE-1000IMT	1000VA / 900W	15,5 min	6 (C13)	145 x 370 x 220 mm	11,8 kg	PF1YR-MU-18	PF3YR-MU-18
EDGE-1500IMT	1500VA / 1350W	17,3 min	6 (C13)	145 x 480 x 220 mm	18,2 kg	PF1YR-MU-18	PF3YR-MU-18
EDGE-500IRM1U	500VA / 450W	15 min	6 (C13)	438 x 380 x 44 mm	11,3 kg	PF1YR-MU-18	PF3YR-MU-18
EDGE-1000IRM1U	1000VA / 900W	15 min	6 (C13)	438 x 480 x 44 mm	16,1 kg	PF1YR-MU-19	PF3YR-MU-19
EDGE-1500IRM1U	1500VA / 1350W	15,1 min	6 (C13)	438 x 600 x 44 mm	22,8 kg	PF1YR-MU-19	PF3YR-MU-19
EDGE-1500IRT2UXL	1500VA / 1350W	17,3 min	6 (C13)	438 x 510 x 88 mm	21,5 kg	PF1YR-MU-19	PF3YR-MU-19
EDGE-2200IRT2UXL	2200VA / 1980W	14,1 min	1 (C19), 6 (C13)	438 x 630 x 88 mm	26,7 kg	PF1YR-MU-20	PF3YR-MU-20
EDGE-3000IRT2UXL	3000VA / 2700W	16,2 min	1 (C19), 6 (C13)	438 x 630 x 88 mm	34,9 kg	PF1YR-MU-20	PF3YR-MU-20
EDGE-3000IRT3UXL	3000VA / 2700W	16,2 min	1 (C19), 9 (C13)	438 x 485 x 132 mm	36,4 kg	PF1YR-MU-20	PF3YR-MU-20
External Battery Cabinets for Edge							
GXT5-EBC48VRT2U (	for EDGE-1500IRT2U	XL)		430 x 497 x 85 mm	28,5 kg		

GXT5-EBC72VRT2U (for EDGE-2200IRT2UXL, EDGE-3000IRT2UXL, EDGE-3000IRT3UXL) 430 x 602 x 85 mm

## **Single Phase UPS**

Liebert® APS



#### Modular Power Protection for Immediate and Future Load Demands

5000-10000-15000-20000 VA

#### **Key Benefits**

- 5 kVA / 4.5 kW single phase output power modules (output PF=0.9)
- Site configurable as single phase or three phase input
- Scalable up to 20 kVA + 10 kVA redundancy
- Stand alone or rack mountable
- Hot-wappable power and battery modules
- Intelligent battery modules with automatic disconnection for anomalous events
- Double conversion efficiency: 92%
- Efficiency in ECO mode up to 98%

- Long life batteries
   (8-10 years design life)
- 1.8 A Charging Current per module
- Optional 10 A charger module
- Input: Terminal blocks
- Output: Terminal blocks, or output sockets with the optional PODs

#### Applications

- Mission critical workstations
- Small computer rooms
- Network equipment
- Telecommunications
- Finance requiring maximum availability

Don't forget to check your Upsell Opportunities! Do your Clients need any complementary products? See: Vertiv™ Avocent® Remote Management Solutions

Technology:	Online Double Conversion, VFI according to IEC62040-3
Connections:	Terminal block (input and output)
<b>Communications:</b>	SNMP/WEB card and Relay Card optional, Vertiv Life™ Services compatible
Options:	Battery Cabinets, redundant Power Modules, Charger, Rack mount kit, Power Distribution PODs, Seismic Floor Brackets

Model	Power Rating	Internal battery configuration	Runtime	Output	Dimensions HxWxD (mm)	Weight
AS2A0NCLMNNX000	5000VA/4500W	1 string x 12 batteries x 9Ahr	13 min	Terminals	970x440x850	189 kg
AS2A0NCMMNNX000	5000VA/4500W	2 string x 12 batteries x 9Ahr	30 min	Terminals	970x440x850	222 kg
AS2A0NCNMNNX000	5000VA/4500W	3 string x 12 batteries x 9Ahr	53 min	Terminals	970x440x850	255 kg
AS2A1NCPMNNX000	5000VA/4500W	4 string x 12 batteries x 9Ahr	82 min	Terminals	970x440x850	296 kg
AS2BONCMMNNX000	10000VA/9000W	2 string x 12 batteries x 9Ahr	13 min	Terminals	970x440x850	231 kg
AS2BONCNMNNX000	10000VA/9000W	3 string x 12 batteries x 9Ahr	23 min	Terminals	970x440x850	264 kg
AS2BONCPMNNX000	10000VA/9000W	4 string x 12 batteries x 9Ahr	30 min	Terminals	970x440x850	296 kg
AS2BONCRMNNX000	10000VA/9000W	6 string x 12 batteries x 9Ahr	53 min	Terminals	970x440x850	362 kg
AS2CONCNMNNX000	15000VA/13500W	3 string x 12 batteries x 9Ahr	13 min	Terminals	970x440x850	272 kg
AS2CONCQMNNX000	15000VA/13500W	5 string x 12 batteries x 9Ahr	25 min	Terminals	970x440x850	337 kg
AS2CONCRMNNX000	15000VA/13500W	6 string x 12 batteries x 9Ahr	30 min	Terminals	970x440x850	370 kg
AS2D0NCPMNNX000	20000VA/18000W	4 string x 12 batteries x 9Ahr	13 min	Terminals	970x440x850	312 kg
AS2DONCRMNNX000	20000VA/18000W	6 string x 12 batteries x 9Ahr	23 min	Terminals	970x440x850	378 kg
AS7EBC2CCLBX000	External battery cabi	net with 2 battery strings			970x440x712	132 kg
AS7EBC6CCLBX000	External battery cabi	net with 6 battery strings			970x440x712	253 kg

Runtime in minutes at 50% load



# Single Phase UPS Liebert<sup>®</sup> GXT3



#### **Reliable On-Line UPS Protection In A Compact Package**

GXT3-10000T230

#### **Key Benefits**

- 0.9 Power Factor
- LCD display in multiple languages
- Automatic frequency detection
- User replaceable hot-swappable internal batteries
- Additional runtime with additional battery cabinets
- Vertiv<sup>™</sup> IntelliSlot<sup>™</sup> communications port
- Includes Windows-based configuration program
- Built-in USB communications
- Separate bypass input available
- Capable for operation as 3-phase or 1-phase input
- Emergency Power Off (EPO)
- Parallelable up to 2+1 units

- Wider input voltage window minimises battery use
- Internal automatic and manual bypass (integrated)
- Standard two-year replacement warranty
- Compact footprint
- Battery cut-off voltage to prevent from overdischarge of batteries

#### Applications

- LAN & WAN Servers
- Network Equipment
- IP Telephony Deployments
- Office Telecommunications systems
- SDN & frame relay applications
- Test and Diagnostic Equipment
- Banks
- Micro Processor-controlled Equipment

Technology:	Online Double Conversion, VFI according to IEC62040-3
Connections:	Terminal block (input and output)
<b>Communications:</b>	SNMP/WEB, Modbus and Relay Card optional, Vertiv Life™ Services available
Options:	Battery Cabinets, Communication cards

Model	Power Rating	Runtime*	Outputs Outlets	Dimensions WxDxH	Weight	Warranty Extension +1Y	Warranty Extension +3Y
GXT3-10000T230	10000VA - 9000W	11 mins	terminal block	300x675x800 mm	105 kg	PF1YR-MU-08	PF3YR-MU-08
GXT3-10000T220	10000VA - 9000W	11 mins	terminal block	300x675x800 mm	140 kg	-	-
GXT3-10000T220 is only UL/cUL approved (not CE)							
GXT3-240TBATT CE - Extended Battery Cabinet for GXT3-10000T230, GXT3-10000T220				300x675x800 mm	110 kg	-	-

## Single Phase UPS Liebert<sup>®</sup> GXT RT+ UPS



	DI NU	
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#### Essential, Affordable UPS for High Performance Protection

GXT RT+ 1000IRT2UXL, 1500IRT2UXL, 2000IRT2UXL, 3000IRT2UXL

Applications

Finance

Telecom

Industrial

Education

Retail

Edge

Government

• IT

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#### **Key Benefits**

- On-line double conversion UPS for mission-critical applications
- Output power factor of 0.9 is higher than majority of comparable competitor models
- Compact dimensions (2Us height) including batteries
- Flexible rack/tower form factor allows for flexible installation
- Simplified installation with at-a-glance configuration information on a user-friendly liquid crystal display (LCD)
- High efficiency ECO mode and lower TCO
- Smart battery charger design
- Flexible communications through RS232 or USB ports
- Slot available for optional SNMP/web monitoring cards
- Available in 1-1.5-2-3 kVA ratings
- Wide input voltage operation (120-300V AC)
- Rack mounting kit included

# **Technical Specifications - 1U Rack Models**

Model	Power Rating	Runtime (50% load)	Output Outlets	Dimensions	Unit Weight	Warranty Extension 1Y	Warranty Extension 3Y
GXTRT-1000IRT2UXL	1000VA / 900W	9 min	6 (C13)	438 x 310 x 88 mm	11 kg	PF1YR-MU-21	PF3YR-MU-21
GXTRT-1500IRT2UXL	1500VA / 1350W	9 min	6 (C13)	438 x 462 x 88 mm	14,5 kg	PF1YR-MU-21	PF3YR-MU-21
GXTRT-2000IRT2UXL	2000VA / 1800W	9 min	6 (C13)	438 x 462 x 88 mm	18,2 kg	PF1YR-MU-22	PF3YR-MU-22
GXTRT-3000IRT2UXL	3000VA / 2700W	11 min	1 (C19), 6 (C13)	438 x 632 x 88 mm	27,6 kg	PF1YR-MU-22	PF3YR-MU-22
External Battery Cabinets for RT+							
GXTRT-EBC24VRT2U (	for GXTRT-1000IRT2	UXL)		410 x 438 x 88 mm	12,5 kg		
GXTRT-EBC36VRT2U (for GXTRT-1500IRT2UXL)				410 x 438 x 88 mm	17,2 kg		
GXTRT-EBC48VRT2U (for GXTRT-2000IRT2UXL)				510 x 438 x 88 mm	23,3 kg		
GXTRT-EBC72VRT2U (	for GXTRT-3000IRT2	UXL)		630 x 438 x 88 mm	41,5 kg		



# Single Phase UPS

Liebert<sup>®</sup> GXT MT +



#### **Compact Tower UPS for High Performance Power Protection**

1000-2000-3000 VA

#### **Key Benefits**

- Double conversion on-line technology
- Compact tower design
- 0.8 output power factor
- Ultra wide input voltage range
- Automatic frequency detection
- High input power factor & low THDi
- Emergency power off (EPO)
- Energy saving mode (ECO) for high efficiency
- LCD display for operational convenience and status/fault information
- Multiple AC output interfaces via Schuko and IEC standard sockets
- Multiple communications options available through USB/RS232, and optional via volts-free contacts and SNMP cards

#### Applications

- VoIP equipment
- Small office networks
- Computer rooms
- Process automation equipment
- Network storage devices

#### Not suitable for UK Market



Technology:Online Double Conversion VFI according to IEC62040-3Connections:IEC input and IEC+Schuko plugs (output power terminals only for 3kVA)Communications:Communication cards RS232, USB, or optional SNMP/WEB or volts-free cards

Model	Power Rating	Runtime*	Outputs Outlets	Dimensions HxWxD	Weight	Warranty Extension +1Y
LI34101CT32	1000VA - 800W	9 mins	3xIEC C13+ 1 x Schuko	223x145x282 mm	9.7 kg	-
LI34111CT32	2000VA - 1600W	10 mins	3xIEC C13+ 1 x Schuko	238x145x397 mm	17.3 kg	-
LI34121CT32	3000VA - 2400W	11 mins	3xIEC C13+ 2 x Schuko +Terminals	336x190x421mm	27.5 kg	-

# Single Phase UPS

Liebert<sup>®</sup> GXT MT +



#### **Compact Tower UPS for High Performance Power Protection**

6000-10000 VA

#### **Key Benefits**

- Double conversion on-line technology
- 0.8 output power factor
- Multiple communication options or network and volt-free contacts card (optional)
- LCD display and intuitive synoptic on the front panel for easy reading of UPS status
- Wide input voltage range
- Input circuit breaker
- Maintenance bypass
- Automatic frequency detection
- Minimized installation time and costs
- Small and compact footprint and size

#### Applications

- VoIP equipment
- Small office networks
- Computer rooms
- Process automation equipment
- Network storage devices

#### Not suitable for UK Market



Technology:	Online Double Conversion VFI according to IEC62040-3
Connections:	Terminals block (input and output)
<b>Communications:</b>	RS232, USB, optional SNMP/WEB or volts-free card
Options:	Communication cards

Model	Power Rating	Runtime*	Outputs Outlets	Dimensions HxWxD	Weight	Warranty Extension +1Y
LI34141CT32	6000VA - 4800W	12 mins	Terminals	688x190x369 mm	72 kg	-
LI34151CT32	10000VA - 8000W	7.9 mins	Terminals	688x190x442 mm	82 kg	-



#### Single Phase UPS Liebert<sup>®</sup> PSA



# Performance Power Protection For PC And Office Equipment

500-650-1000-1500 VA

#### **Key Benefits**

- Available in four ratings: 500, 650, 1000 and 1500VA
- 3 to 6 battery-backed UPS sockets, depending on model size
- One to two surge-only sockets, differentiated by colour
- USB cable included
- User replaceable batteries
- Up to 4 minutes of battery backup time at full load
- Full sequenced battery testing to ensure batteries are available when needed
- Advance early warning of UPS shutdown
- 3 years standard warranty
- RJ-45 port for data line surge protection

#### Applications

- Professional Desktop PC
- Professional Workstations
- Small Routers, Bridges & Hubs
- Point-of-Sale Terminals
- Other Sensitive Electronics

Technology:	Line Interactive, VI according to IEC62040-3
Connections:	IEC plugs (input and output)
<b>Communications:</b>	USB port (all units)

Model	Power Rating	Runtime*	Outputs Outlets	Dimensions HxWxD	Weight	Warranty Extension +1Y
PSA500MT3-230U	500VA - 300W	12 mins	(3+1) IEC320-C13	171x95x356 mm	5.4 kg	PF1YR-MU-01
PSA650MT3-230U	650VA - 390W	8.5 mins	(3+1) IEC320-C13	171x95x356 mm	5.9 kg	PF1YR-MU-01
PSA1000MT3-230U	1000VA - 600W	12 mins	(6+2) IEC320-C13	234x147x360 mm	9.5 kg	PF1YR-MU-02
PSA1500MT3-230U	1500VA - 900W	10.5 mins	(6+2) IEC320-C13	234x147x360 mm	11.6 kg	PF1YR-MU-04

# Single Phase UPS Liebert<sup>®</sup> itON

## **Reliable Power Protection for Desktop Workstations**

400-600-800-1000-1500-2000 VA

#### **Key Benefits**

- Automatic voltage regulator (AVR)
- Compact size
- Light weight
- Easy operation
- Overload protection and alarm
- Auto re-start with AC recovery
- Fast charging
- Cold start function
- Available in ratings from 400 VA up to 2000 VA
- USB port (for 1000 VA, 1500 VA, 2000 VA)
- Flexible output power sockets combination:
  - Schuko sockets (for 400 VA, 600 VA, 800 VA)
  - Schuko and IEC sockets (for 1000 VA, 1500 VA, 2000 VA)

#### Applications

- Desktop PCs
- Professional workstations
- Small routers, bridges and hubs

Other sensitive electronics

- Point-of-sale terminals
- PBXs

#### Not suitable for UK Market

Technology:	Line interactive (VI according to IEC62040-3)
Connections:	Output IEC C320-C13 and Schuko (check models)
Communications:	USB port for 1000-1500-2000VA ratings

Model	Power Rating	Runtime*	Outputs Outlets	Dimensions HxWxD	Weight	Warranty Extension +1Y
LI32101CT00	400VA - 240W	6 mins	2 x Schuko	142x101x279 mm	3.6 kg	-
LI32111CT00	600VA - 360W	6 mins	2 x Schuko	142x101x279 mm	4.2 kg	-
LI32121CT00	800VA - 480W	3 mins	2 x Schuko	142x101x279 mm	4.9 kg	-
LI32131CT20	1000VA - 600W	6 mins	2 x Schuko + 2 x IEC C13	164x146x341 mm	8.0 kg	-
LI32141CT20	1500VA - 900W	5 mins	3 x Schuko + 3 x IEC C13	205x146x391 mm	11.1 kg	-
LI32151CT20	2000VA - 1200W	3 mins	3 x Schuko + 3 x IEC C13	205x146x391 mm	11.5 kg	-



## **Single Phase UPS**

Liebert<sup>®</sup> PSP



#### **Best-Value Power Protection for PCs and Peripherals**

500-650 VA

#### **Key Benefits**

- 3 battery-backed UPS outlets and one surge protection-only outlet differentiated by colour
- USB port and cable
- User replaceable batteries
- Up to 4 minutes of battery backup time at full load
- Protects against lightning, spikes and surges
- Full sequenced battery testing to ensure batteries are available when needed
- Advance early warning of UPS shutdown
- 3 years standard warranty
- RJ-45 port for data line surge protection

#### Applications

- Professional workstations
- Small routers and bridges
- Point-of-sale terminals
- Other sensitive electronics

Technology:	Offline, VFD according to IEC62040-3
Connections:	IEC plugs (input and output)
Communications:	USB (all units)

Model	Power Rating	Runtime*	Outputs Outlets	Dimensions HxWxD	Weight	Warranty Extension +1Y
PSP500MT3-230U	500VA - 300W	11 mins	(3+1) IEC320-C13	215x87x251 mm	3.9 kg	PF1UR-MU-00
PSP650MT3-230U	650VA - 390W	8 mins	(3+1) IEC320-C13	215x87x251 mm	3.9 kg	PF1UR-MU-01

# **Racks and Containment**

In the modern data centre landscape, standardisation is becoming the norm. But not everywhere and not done randomly. The first place you'd want to start data centre normalisation is the racking systems and containment solutions.

Starting with flexible, easily installed, adaptable and pre-configured customised server racks and network cabinets saves you costs, footprint and it increases the performance, efficiency, and reliability of your critical infrastructure.

Let's discover the data centre custom containment solutions that will help you reach your objectives.



#### Vertiv<sup>™</sup> VR Rack



## Rapid deployments everywhere you operate

Standardise your deployments around the world and bring them online faster with the Vertiv™ VR rack. The Vertiv VR supports a wide variety of equipment, including: servers, storage, switches, routers, PDUs, UPSs, console port servers and KVM switches.

#### **Key Benefits**

- Available in 8 standard sizes
- Full depth adjustability of the 19" rails
- Frame design allow for more than 2.5" more usable depth than similar sized racks
- Doors that have 77% perforation and can be hinged on either side
- Tool-less removable top panel has four cable entry holes allowing for up to 2000 Cat6 cables, or 60A PDU plugs
- Two dual purpose full height depth adjustable PDU / cable management brackets mounted in the zero U space with tool-less button mounting of rack PDUs, accessory mounting

holes for tool-less cable management accessories, and integrated cable tie off positions

- 42U frame height that allows for the rack to pass through standard doors on casters
- Simple external baying, allows for metric baying or on 24" centres
- Split side panels with single locking slam latch allows for easy single person removal / installation

#### Applications

- Data centres
- Server rooms
- Edge applications

Frame:	- Frame capable of supporting up to 3000 lbs (1360kg) Static, 2250 lbs (1022kg) Dynamic.
	- Simple external baying, allows for metric or on 24" centres and leveling feet incorporated into the frame for easy adjustment.
	- 42U frame height that will allow access through standard doors on four swivel casters.
Certifications:	EIA 310E - UL2416 - RoHS - REACH
Color:	Frame, doors, side panels, top panel, rails and PDU brackets are powder coated RAL 7021 (Black)
Warranty:	Warranty up to 5 Years – 36 Month standard + 24 After Product registration

Part Number	U	Height mm (inches)	Width mm (inches)	Depth mm (inches)
VR3100	42	2000 (78.6")	600 (23.6")	1100 (43.3")
VR3100SP	42	2000 (78.6")	600 (23.6")	1100 (43.3")
VR3300	42	2000 (78.6")	600 (23.6")	1200 (47.8")
VR3300SP	42	2000 (78.6")	600 (23.6")	1200 (47.8")
VR3150	42	2000 (78.6")	800 (31.5")	1100 (43.3")
VR3150SP	42	2000 (78.6")	800 (31.5")	1100 (43.3")
VR3350	42	2000 (78.6")	800 (31.5")	1200 (47.8")
VR3350SP	42	2000 (78.6")	800 (31.5")	1200 (47.8")
VR3107	48	2265 (89.2")	600 (23.6")	1100 (43.3")
VR3107SP	48	2265 (89.2")	600 (23.6")	1100 (43.3")
VR3307	48	2265 (89.2")	600 (23.6")	1200 (47.8")
VR3307SP	48	2265 (89.2")	600 (23.6")	1200 (47.8")
VR3157	48	2265 (89.2")	800 (31.5")	1100 (43.3")
VR3157SP	48	2265 (89.2")	800 (31.5")	1100 (43.3")
VR3357	48	2265 (89.2")	800 (31.5")	1200 (47.8")
VR3357SP	48	2265 (89.2")	800 (31.5")	1200 (47.8")

\*Nominal dimensions, reference submittal drawings for exact dimensions, VRXXXXSP ship with 2000 lb. rated shock packaging



#### Doors

Single and split 77% perforated doors providing maximum airflow. Lift off hinges for easy removal, and field reversibility.



### **Tool-less Cable** Management

Requires just inserting and twisting the toolless accessories on 19" vertical mounting rail, or the PDU / cable management brackets.



#### **Integrated 19" Rail** Alignment

Ensures 19" rails are positioned correctly without measuring.

provide security.



Leveling Feet Accessible from the top of the frame for easy adjustment.



# **CABLE MANAGEMENT**

#### Horizontal Cable Organisers with Metal D Rings

Part Number	Description		50
VRA1000	1U Horizontal Cable Organiser with Metal D Rings (Qty. 1)		
VRA1001	2U Horizontal Cable Organiser 2U with Metal D Rings (Qty. 1)		
		VRA1000	VRA1001

#### Horizontal Cable Managers with Covers

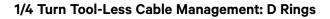
Part Number	Description		1000
VRA1002	Horizontal Cable Manager, 1U x 4" Deep, Single-Sided with Cover (Qty. 1)		
VRA1003	2U x 4" Deep Horizontal Cable Manager, Single-Sided with Cover (Qty. 1)		
VRA1022	2U x 6" Deep Horizontal Cable Manager, Single-Sided with Cover (Qty. 1)	VRA1002	VRA1022
VRA1023	1U x 6" Deep Horizontal Cable Manager, Single-Sided with Cover (Qty. 1)	VRAIOOZ	VRAI022

#### **Tool-Less Cable Management: Lobster Claw**

Part Number	Description
VRA1004	Tool-Less Cable Management -Lobster Claw (Qty. 10)
VRA1006	Tool -Less Cable Management -Lobster Claw (Qty. 100)

#### **Tool-Less Cable Management: Velcro Strap**

Part Number	Description
VRA1005	Tool Less Cable Management - Velcro Strap (Qty. 10)
VRA1007	Tool Less Cable Management - Velcro Strap (Qty. 100)



Part Number	Description		
VRA1008	Tool-less D Rings Small (Qty. 10)		
VRA1009	Tool-less D Rings Small (Qty. 100)		
VRA1010	Tool-less D Rings Large (Qty. 10)	VRA1008 and	VRA1010 and
VRA1011	Tool-less D Rings Large (Qty. 100)	VRA1009	VRA1011

#### Horizontal Cable Manager Side Channel

Part Number	Description	
VRA1013	Horizontal Cable Organizer Side Channel 20 to 33 inch adjustment (Qty. 1)	
VRA1024	Horizontal Cable Organizer Side Channel 22 to 38 inch adjustment (Qty. 1)	



VRA1004



VRA1005



# CABLE MANAGEMENT

#### Vertical Cable Management Kit

Part Number	Description	
VRA1014	Vertical Cable Manager 600mm Wide 42U (Qty. 2)	
VRA1015	Vertical Cable Manager for 600mm Wide 48U (Qty. 2)	
VRA1016	Vertical Cable Manager for 800mm Wide 42U (Qty. 2)	
VRA1017	Vertical Cable Manager for 800mm Wide 48U (Qty. 2)	





VRA1014

VRA1016

VRA1018

#### **Hinged Covers**

Part Number	Description	
VRA1018 Hinged Covers 800mm Wide 42U Vertical Cable Manager (Qty. 2)		
VRA1020	Hinged Covers 800mm Wide 48U Vertical Cable Manager (Qty. 2)	



#### Vertical Cable Organiser

Part Number	Description
VRA1021	Vertical Cable Organiser, 8 Cable Rings, Zero U (Qty. 2)





# **CABLE TROUGH**

Power and Communications cabling on top of a row of equipment can be a hassle. Cable Troughs are designed to organize and protect your sensitive wiring. Colour: black.

Part Number	Description
VRA8581	Cable Trough, 300mm
VRA8561	Cable Trough, 600mm
VRA8571	Cable Trough, 800mm
VRA8567	Cable Trough, End Caps (Set of 2)
VRA8573	Cable Trough Cover, 300mm
VRA8574	Cable Trough Cover, 600mm
VRA8575	Cable Trough Cover, 800mm
VRA8501	Cable Trough, Cable Alignment Kit (Set of 2)
VRA8502	Cable Trough, Connector Kit (Set of 2)
VRA8503	Cable Trough, Cable Separation Kit (Set of 12)
VRA8504	Cable Trough Grounding Wire, 750mm (Set of 10)
VRA8505	Cable Trough, 300mm Height Extension
VRA8506	Cable Trough, 600mm Height Extension



VRA8561 Cable Trough 600mm

# Integrated Rack Solutions

# AIR FLOW MANAGEMENT

#### Blank Panel 19" Tool Less Blanking Panel

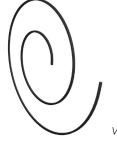
Part Number	Description	
VRA2000	1U 19" Black Plastic Tool Less Airflow Blanking Panel (Qty. 10)	
VRA2001	1U 19" Black Plastic Tool Less Airflow Blanking Panel (Qty. 200)	
VRA2002	19" Sheet Metal Airflow Blanking Panel Kit (1U, 2U, 4U, 8U) Black (Qty. 1 ea. Size)	
VRA2003 1U 19" Sheet Metal Airflow Blanking Panel Kit Black (Qty. 2) Black		



VRA2002

#### Air Recirculation Prevention Kit

Part Number	Description
VRA2004	Air Recirculation Prevention Kit



VRA2004

#### 19" Rail Brush Strips

Part Number	Description
VRA2005	19" Rail Brush Strips, 800mm Wide (Qty. 12)



VRA2005

#### Cable Pass Through Brush Kit for Top Panel

Part Number	Description
VRA2006	Cable Pass Through Brush Kit for Top Panel (Qty. 8)



# Integrated Rack Solutions



#### 19" Depth Adjustable Fixed Shelf 250lbs Black

Part Number	Description
VRA3000	1U Depth Adjustable Fixed shelf 250lbs Black (Qty. 1)

#### 2U 19" Cantilever Fixed Shelf 50Lbs Black

Part Number	Description	
VRA3001	2U 19" Cantilever Fixed Shelf 50lbs Black (Qty. 1)	

#### 1U Depth Adjustable Sliding Shelf 200lbs Black

Part Number	Description	
VRA3002	1U Depth Adjustable Sliding Shelf 100lbs Black (Qty. 1)	1
VRA3003	1U Depth Adjustable Sliding Shelf 200lbs Black (Qty. 1)	

#### 1U Depth Adjustable Equipment Support Rails 100lbs

Part Number	Description	1
VRA3004	1U Depth Adjustable Equipment Support Rails 100lbs (Qty. 2)	



#### **Bolt Down Brackets**

Part Number	Description
VRA4000	VR Bolt Down Brackets (Qty. 2)
VRA4001	VR Anti Tip Stabilizer Plate for 600mm/800mm Wide cabinets (Qty. 2)

#### **Baying and Hardware**

Part Number	Description
VRA5002	Baying Kit: Baying Hardware Kit (1 Kit)
VRA5003	Baying Gasket kit for use when baying racks on 24" centres

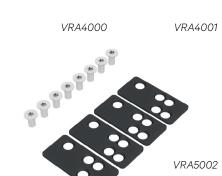




VRA3000







# SHELVES AND SUPPORT BRACKETS

#### **Mounting Hardware**

Part Number	Description
VRA5001	10-32 Cage Nuts (Qty. 50)
VRA5000	Mounting Hardware (Qty. 50 M6 cage nuts, screws, washers)



Zero U Accessory Mounting Bracket (Qty. 2)

Part Number	Description
VRA5004	Zero U Accessory Mounting Bracket (Qty. 2)



**DOORS AND SECURITY** 

#### **Handle Options**

Part Number	Description
VRA6023	Combination Lock Handle (Qty. 2)
VRA6022	Standard Door Handle (Qty. 1)





VRA6022



## SERVICE PARTS

#### 19" Server Rails

Part Number	Description
VRA6013	42U x 600mm Wide 19" Server Rails (Cage Nut) Black (Qty. 2)
VRA6014	42U x 800mm Wide 19" Server Rails (Cage Nut) Black (Qty. 2)
VRA6015	48U x 600mm Wide Server Rails (Cage Nut) Black (Qty. 2)
VRA6016	48U x 800mm Wide 19" Server Rails (Cage Nut) Black (Qty. 2)

### Single Perforated Doors

Part Number	Description
VRA6001	42U x 600mm Wide Single Perforated Door Black (Qty. 1)
VRA6002	42U x 800mm Wide Single Perforated Door Black (Qty. 1)
VRA6003	48U x 600mm Wide Single Perforated Door Black (Qty. 1)
VRA6004	48U x 800mm Wide Single Perforated Door Black (Qty1)

## **Split Perforated Doors**

Part Number	Description
VRA6005	42U x 600mm Wide Split Perforated Doors Black (Qty. 2)
VRA6006	42U x 800mm Wide Split Perforated Doors Black (Qty. 2)
VRA6007	48U x 600mm Wide Split Perforated Doors Black (Qty. 2)
VRA6008	48U x 800mm Wide Split Perforated Doors Black (Qty. 2)

### PDU/Cable Management Brackets

Part Number	Description
VRA6025	42U 4" Wide PDU/Cable Management Bracket Black (Qty 2)
VRA6026	48U 4" Wide PDU/Cable Management Bracket Black (Qty 2)

## Miscellaneous

Part Number	Description
VRA6021	Replacement Roof Grommets Black (Qty. 8)
VRA6024	Caster Kit (Qty. 4)

## **Split Side Panels**

Part Number	Description
VRA6009	42U x 1100mm Deep Split Side Panels Black (Qty. 2)
VRA6010	42U x 1200mm Deep Split Side Panels Black (Qty. 2)
VRA6011	48U x 1100mm Deep Split Side Panels Black (Qty. 2)
VRA6012	48U x 1200mm Deep Split Side Panels Black (Qty. 2)

## **Top Panels**

Part Number	Description
VRA6017	VRA6017: 600mm Wide x 1100mm Deep Top Panel Black (Qty. 1)
VRA6018	VRA6018: 800mm Wide x 1100mm Deep Top Panel Black (Qty. 1)
VRA6019	VRA6019: 600mm Wide x 1200mm Deep Top Panel Black (Qty. 1)
VRA6020	VRA6020: 800mm Wide x 1200mm Deep Top Panel Black (Qty. 1)

## **Power Switching and Distribution**

When we are talking about PDU there are features that play key role such as modularity, scalability and efficiency, etc. Our focus consists to provide solution standard, specific and custom being a referent point for the customers.

Each of our products meets the strictest standards for durability and safety. Contact the Vertiv team for modular designs for data centres of any type or dimensions.



## Vertiv<sup>™</sup> Liebert<sup>®</sup> RXA

Suitable for any IT space, the Vertiv Liebert RXA remote power distribution system helps meet high density power demands, with an intelligent monitoring system.

To further enhance scalability, pairing the RXA with our MBX Busway is the perfect match. Thanks to this technology, it's possible to have a flexible system that allows you to easily add new modules.

#### **Vertiv Liebert® RXA**



#### **Remote Power Panel RXA**

For more information on our RPP portfolio or your individual project support please contact your Vertiv Channel Account Manager or email us at <u>UKIE.channel@vertivco.com</u>. You can also find more information on our Website <u>Vertiv.com</u>.

#### **Key Benefits**

- Reliable uninterrupted power
- High power density
- Available in two ratings
- Flexible and scalable
- Hot-swappable panel board system
- Intelligent oversight with: Liebert DPM monitoring system

#### Applications

- Banking, Financial and Insurance
- Data Centre/Colocation/Hosting

### **High-Availability Configurations**

The flexible Vertiv™ Liebert® RXA is easily configured to accommodate current site needs and future growth.





 Single: 328 mm x 603 mm
 Double: 603 mm x 6

 (13" x 24") | 84pole | 250/400 A
 (24" x 24") | 168pole

- Wall-mounted
- Back supported by column Unistrut or wire cage

Double: 603 mm x 603 mm (24" x 24") | 168pole | 250/400 A

- Free-standing
   Drop-in replacement for
- Drop-in replacement
   floor tile



Double: 328 mm x 1207 mm (13" x 48") | 168pole | 250/400 A • Wall-mounted

Back supported



Triple: 603 mm x 932 mm (24" x 37") | 252pole | 250/400 A

- Free-standing
- Panel boards: front rear, one side



Quadruple: 603 mm x 1260 mm (24" x 50") | 336pole | 250/400 A

- Free-standing
- Panel boards: front, rear, both sides

**Technology:** Smart Remote Power Panel with hot-swappable and finger-safe panelboard with 84 P. Monitoring system embedded.

**Connections: :** USB port, HTTP/HTTPS, Vertiv Protocol, SNMP v1/v2c/v3, BACnet IP and Modbus TCP output, BACnet/ MSTP and Modbus/RTU

**Options:** Miniature Circuit Breakers and panelboard accessories, bottom cable Entry Kit, TVSS (Surge Protection Device), Comunication Card, Integrated Monitoring System (liebert DPM)

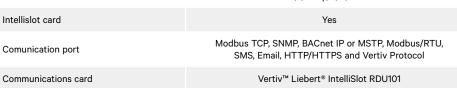
## Vertiv<sup>™</sup> Liebert® RXA



PN	Name	Rating (A)	Dimensions WxDxH	Weight
REUAS64AAA00	RXA 250A 84P Smissline - No Monitoring	250	604x329x2000	155
REUAS6GAAA00	RXA 250A 84P Smissline - with DPM Monitoring and Comm. Card	250	604x329x2000	155
REUAS64BAA00	RXA 250A 84P Smissline - No Monitoring, with TVSS	250	604x329x2000	155
REUAS6GBAA00	RXA 250A 84P Smissline - with DPM Monitoring and Comm. Card and TVSS (see note 6)	250	604x329x2000	155
REUAS24AAA00	RXA 400A 84P Smissline - No Monitoring	400	604x329x2000	175
REUAS2GAAA00	RXA 400A 84P Smissline - with DPM Monitoring and Comm. Card	400	604x329x2000	175
REUAS24BAA00	RXA 400A 84P Smissline - No Monitoring, with TVSS	400	604x329x2000	175
REUAS2GBAA00	RXA 400A 84P Smissline - with DPM Monitoring and Comm. Card and TVSS	400	604x329x2000	175
Accessories				
RAUABS401MC160	Miniature Circuit Breaker 1P C16A	16	18x82x91	0,14
RAUABS401MC320	Miniature Circuit Breaker 1P C32A	32	18x82x91	0,14
RAUABS401MC16N	Miniature Circuit Breaker 1P+N C16A	16	36x82x91	0,28
RAUABS401MC32N	Miniature Circuit Breaker 1P+N C32A	32	36x82x91	0,28
RAUABS402MC160	Miniature Circuit Breaker 2P C16A	16	36x82x91	0,28
RAUABS402MC320	Miniature Circuit Breaker 2P C32A	32	36x82x91	0,28
RAUABS403MC160	Miniature Circuit Breaker 3P C16A	16	54x82x91	0,42
RAUABS403MC320	Miniature Circuit Breaker 3P C32A	32	54x82x91	0,42
RAUABS403MC16N	Miniature Circuit Breaker 3P+N C16A	16	54x82x91	0,55
RAUABS403MC32N	Miniature Circuit Breaker 3P+N C32A	32	54x82x91	0,55

## Vertiv<sup>™</sup> Liebert<sup>®</sup> RXA Specifications

Technical Characteristics	Model / Ratings / Version Liebert® RXA 250 A	Model / Ratings / Version Liebert® RXA 400 A
Rated current of the assembly (In)	250 A	400 A
Rated nominal power of the assembly (Pn)	173 kVA @400 V 277 kVA @400	
Rated and operational voltage (Un) & (Ue)	230/400	V +-5%
Rated circuit insulation voltage (Ui)	440	Vac
Rated frequency (fn)	50/60	) Hz
Number of outgoing circuits	max.	84
Number of poles	3Ph +	N + G
Operating temperature	0° +	40°C
Storage temperature	-25°	+70°
Display*	Integrated 9" color t	ouchscreen display
Power Monitoring System*	Liebert	<sup>®</sup> DPM
Standards		
Environmental	REACH; Ro	HS; WEEE
Regulatory	IEC 614	439-2
Mechanical Characteristics		
Height	2000 m	m / 79"
Height	2000 m 603 mr	
-		n / 24"
Width	603 mn	n / 24"
Width Depth	603 mr 328 mr	n / 24" n / 13" 175 Kg
Width Depth Weight (w/o protection devices)	603 mm 328 mm 155 Kg	n / 24" n / 13" 175 Kg 1 mate
Width       Depth       Weight (w/o protection devices)       Colour	603 mm 328 mm 155 Kg Ral 702	n / 24" n / 13" 175 Kg 1 mate
Width       Depth       Weight (w/o protection devices)       Colour       Degree of protection (closed/open doors)	603 mm 328 mm 155 Kg Ral 702 IP2	n / 24" n / 13" 175 Kg 1 mate 20 loor w/ display
WidthDepthWeight (w/o protection devices)ColourDegree of protection (closed/open doors)Front main door type	603 mm 328 mm 155 Kg Ral 702 IP2 Lexan window o	n / 24" n / 13" 175 Kg 1 mate 20 loor w/ display to Branch Circuit Monitoring
Width         Depth         Weight (w/o protection devices)         Colour         Degree of protection (closed/open doors)         Front main door type         Second access door type	603 mm 328 mm 155 Kg Ral 702 IP2 Lexan window of Safety door w/ direct access	n / 24" n / 13" 175 Kg 1 mate 20 loor w/ display to Branch Circuit Monitoring
WidthDepthWeight (w/o protection devices)ColourDegree of protection (closed/open doors)Front main door typeSecond access door typeCustomer comunication pins	603 mm 328 mm 155 Kg Ral 702 IP2 Lexan window of Safety door w/ direct access of To	n / 24" n / 13" 175 Kg 1 mate 20 door w/ display to Branch Circuit Monitoring p
Width         Depth         Weight (w/o protection devices)         Colour         Degree of protection (closed/open doors)         Front main door type         Second access door type         Customer comunication pins         Cables entry	603 mm 328 mm 155 Kg Ral 702 IP2 Lexan window of Safety door w/ direct access To Top/Be	n / 24" n / 13" 175 Kg 1 mate 20 door w/ display to Branch Circuit Monitoring p
WidthDepthWeight (w/o protection devices)ColourDegree of protection (closed/open doors)Front main door typeSecond access door typeCustomer comunication pinsCables entryCables exit	603 mm 328 mm 155 Kg Ral 702 IP2 Lexan window of Safety door w/ direct access To Top/Be	n / 24" n / 13" 175 Kg 1 mate 20 10or w/ display to Branch Circuit Monitoring p ottom
Width         Depth         Weight (w/o protection devices)         Colour         Degree of protection (closed/open doors)         Front main door type         Second access door type         Customer comunication pins         Cables entry         Cables exit	603 mm 328 mm 155 Kg Ral 702 Lexan window o Safety door w/ direct access To Top/Bo	n / 24" n / 13" 175 Kg 1 mate 20 1 or w/ display to Branch Circuit Monitoring p ottom ottom c Branch Circuit Monitoring p



\*Not included in the Liebert RXA model without a monitoring system



Figure 1. Vertiv™ Liebert® RXA (second access door view)



Figure 2. Vertiv<sup>™</sup> Liebert<sup>®</sup> RXA (internal view)



Figure 3. Vertiv™ Liebert® RXA without Vertiv™ Liebert® DPM monitoring system



#### The Liebert DPM consists of a two-level system monitoring:

**Branch Circuit Monitoring Level:** shows the data for each outcoming circuit from the unit, either for monophase or triphase loads:

#### **Input Monitoring Level**

-Shows the data from the Main Input Circuit Breaker:

- Phase Current
- Neutral Current
- Ground Current
- Current Load Percentage
- Voltage Line-to-Line
- Voltage Line-to-Neutral
- Frequency
- Real Power (kW)
- Apparent Power (kVA)
- Power Factor
- Energy (kW-Hours)
- Peak Current (A)
- Peak Demand (kW)
- Current Crest Factor
- Current Total Harmonic Distortion

#### (THD) in total THD - includes 3rd, 5th, 7th and 9th Harmonics

- Voltage Total Harmonic Distortion (THD) in total THD - includes 3rd, 5th, 7th and 9th Harmonics
- Circuit identification and status of the MICB
- Current Total Harmonic Distortion

#### **Branch Circuit Monitoring Level**

-Shows the data for each outcoming circuit from the unit, either for monophase or triphase loads:

- Phase Current
- Percent Load
- Real Power (kW)
- Power Factor
- Energy (kW-Hours)
- Peak Current (A)
- Peak Demand (kW)
- Circuit identification of each breaker



Front 9" touch screen coloured display with visible and audible alarms to prevent downtime

= status	Normal Normal	Operation		LIFE SERVICES
400A LIEBERT RXA	/			
		Total - 10	9.6 kW / 10	9.6 kVA
400	A	<b>40%</b>	50%	100%
			Current	100%
3 CB1-16A-3P	CB13-16A-3P 4	-	-	-
7	6	-	-	
9 CB2-16A-3P	CB14-16A-3P+N 10	38%	40%	<b>41</b> %
13 15 CB3-32A-2P	14	Phase A	Phase B	Phase C
<sup>15</sup> <sup>17</sup> CB4-16A-2P	CB14-16A-3P+N 18	230.4 V(x+n)	230.3 V(y-n)	229.9 V(r-n)
19 Legend	20	152.1 A(rms)	160.1 A(rms)	164.2 A(rms)

On left is a "single-line" electrical diagram of the Liebert® RXA unit, displaying the input and output distribution of branch panel boards and sub-feed breakers. On right is the unit's total output load, with individual power levels for each phase in a 3-phase distribution, including voltage and amperage for each phase.

status setup	$\overline{\mathbf{C}}$	)	No	ormal Operation	LIFE SERVICES LOO OUT
EVENT LOG					Export Filter
Date/Time	Туре	ID	Status	Component SubComp	Description
9/7/2020 9:31 AM	Fault	335	ON	CB1-16A-3P	Ground Overcurrent: 3A
9/7/2020 9:31 AM	Fault	339	ON	MICB 400A	Breaker Tripped
9/7/2020 9:31 AM	Fault	335	ON	CB2-16A-3P	Ground Overcurrent: 1A
9/7/2020 9:31 AM	Fault	232	ON	CB2-16A-3P	Overcurrent: 17A
9/7/2020 9:31 AM	Fault	235	ON	CB4-16A-2P	Energy Measure Rollover
9/7/2020 9:31 AM	Fault	120	ON	CB14-16A-3P+N	Overcurrent: 34A
9/7/2020 9:31 AM	Fault	123	ON	CB14-16A-3P+N	Neutral Overcurrent
9/7/2020 9:31 AM	Fault	118	ON	CB4-16A-2P	Overcurrent: 34A

Displays the event log with summaries of power events that occurred in the unit, including the location, date, and time of the events. 3-phase distribution, including voltage and amperage for each phase.

## **MBX Busway**

Liebert<sup>®</sup> MBX gives data centre managers flexibility, control, and peace of mind when changing and adapting to keep pace with hardware requirement demands.



### Liebert<sup>®</sup> MBX Busway



#### **Key Benefits:**

- Open channel busway: finger-safe IP2X certified
- Solid Joint Pack construction
- Lightweight Aluminum chassis
- Ground-first, break-last safety

## Liebert® MBX gives data centre managers flexibility, control, and peace of mind when changing and dapting to keep pace with hardware requirement demands.

#### Applications

- Data centres of any size
- Data centres with frequent or planned configuration changes
- Single or dual-bus configurations
- Raised and non-raised floors

## Tap-off box receptacles IEC 309 options Tap-off Box Benefits

- Change power requirements easily
- Plug-n-play to rack/rack PDU
- No interruption to existing critical loads
- No electrician required for installation
- Amps and receptacles sized to meet server needs

• Relocate and reuse tap-off box anywhere along the busway to maximise investment

#### **Tap-off Box Features**

- Up to 63A per tap off Box
- Up to 600VAC
- 15 to 25 kA short ciruit breaking capacity
- Accommodates up to 5 receptacles per box
- Flush-mounted receptacles
- Fits anywhere along the busway
- Tap-off boxes are readily installed on energised busway and are fully interchangeable

Rated Current (A)	250	400	630	800	1000
Rated Operational Voltage (V)	600	600	600	600	600
Rated Insulation Voltage (V)	1000	1000	1000	1000	1000
Nominal Frequancy	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Short Circuit					
Short Circuit Current Rating (rms symmetrical 1 second) kA	25	30	36	35	35
Peak Value (kA)	52.5	65	77	77	73.5
Short Circuit Conditional Rating (kAIC)	50	50	50	50	65
Bus Material	Copper	Copper	Copper	Copper	Aluminum
Environmental					
Operating Ambient Temperature			0° to 40°C		
Protection Rating			IP2X, CE		
Enviromental Standards			RoHS, REACH	4	
Phase Conductor					
Cross Sectional Area (mm²)	122	210	255	320	806
Neutral Conductor					
Cross Sectional Area (mm²)	122	210	255	320	806
solated Ground Conductor					
100% Earth Cross Sectional Area (mm²)	122	210	255	320	806
Housing Ground Conductor					
Cross Sectional Area (mm²)	1412	1412	2030	2030	2797
Overall Dimensions					
Height x Width of 4 Bar System (mm)	44 x 175	44 x 175	52 x 180	52 x 180	74x202
Height x Width of 5 Bar System (mm)	44 x 210	44 x 210	52 x 215	52 x 215	74x235
Weight					
Weight of 4 Bar System (kg/m)	9.45	14.2	19.4	23.2	17.7
Weight of 5 Bar System (kg/m)	11.81	17.75	24.25	29	22.1
Resistance (R)					
Resistance (m $\Omega$ /m)	0.173	0.108	0.098	0.078	0.060
Reactance (X)					
Reactance (mΩ/m)	0.116	0.094	0.078	0.069	0.070
Impedance (Z)					
mpedance (mΩ/m)	0.208	0.143	0.125	0.104	0.092
Voltage Drop at Full Load					
Power Factor = 0.7 (V/m)	0.088	0.097	0.135	0.142	0.126
Power Factor = 0.8 (V/m)	0.088	0.096	0.134	0.141	0.125
Power Factor = 0.9 (V/m)	0.084	0.093	0.131	0.138	0.122
Power Factor = 1.0 (V/m)	0.090	0.099	0.137	0.144	0.128

## **Power Distribution**

Increasing rack power density both in the data centre and at the network edge means that reliable power distribution is crucial.

Our innovative power distribution units and rack PDUs not only maintain power, but they also enable us to support you in any challenges your IT infrastructure might face.

From basic PDUs, to monitored and switched rack power distribution units, to locking receptacles, Vertiv's solutions will offer the power distribution you need, as well as remote monitoring and management of your assets' power usage, so you can rest assured everything is running at peak performance.



### **Enhanced Performance and Management of Dynamic IT Spaces**

#### Enhance Business Agility, Efficiency and Availability with Vertiv<sup>™</sup> Geist<sup>™</sup> Rack PDUs

Data centre investments are sizable, and each component of the power chain from the facility entrance to the rack power distribution is crucial to enabling equipment availability. Enable your IT investment and your business to stay protected with the Vertiv<sup>™</sup> Geist<sup>™</sup> family of Rack PDU (rPDU) offerings. The next generation of rPDUs provides the industry's highest availability and most intelligent power monitoring and distribution — complete with simplified energy management, a future-proof design, and cost savings that ensure your data centre and your business can operate at peak efficiency. Our complete portfolio of rPDUs offer value beyond power distribution. They easily integrate with your data centre infrastructure management systems to make your organisation more resilient, enhance your business and provide the technological support you need to grow your company.



## **Basic rPDUs**

Vertiv<sup>™</sup> Geist<sup>™</sup> Basic Rack PDUs (rPDUs) offer reliable, space saving, and cost-effective power distribution at the rack. Our Basic rPDUs meet a broad range of power distribution requirements for all IT applications.

## **Intelligent rPDUs**

Vertiv<sup>™</sup> Geist<sup>™</sup> offers a wide range of monitored and switched rPDUs equipped with a network interface to allow for remote monitoring, management, and automated alerts. Vertiv<sup>™</sup> Geist<sup>™</sup> rPDUs offer important insights on how to improve data centre energy efficiency while enabling you to prevent downtime, providing notifications when user-specified thresholds for power and environmental conditions are breached.

5-Year limited warranty if registered within

120 days of purchase, otherwise

warranty defaults to 3 years.

### At a Glance

#### Colour

Black powder coat finish.

Red, Orange, Yellow, Green, Blue, White available on Built-to-Order units.

#### Configure-to-Order and Engineer-to-Order Capabilities

#### Certifications

- RoHS
- Assessed to EN 60950 for CE
- Assessed to EN 55032 and EN 55024 for CE
  - UL & c-UL Listed 60950
  - FCC Part 15 Class A Conformance

Built-to-Order units provide additional features, coloured chassis options, and varying power and receptacle configurations. Contact your Vertiv sales team for more information.

Warranty

\*Certifications vary by model. Refer to the product data sheet for specific regulatory information.

## Combination Outlet C13 / C19



#### Simplify rPDU specification, purchase, and deployment.

The Combination Outlet C13/C19 provides the highest level of rack power versatility. The 2-in-1 design allows you to connect both IEC C14 and C20 plugs into the same outlet.

- High retention outlets reduce the risk of costly downtime from accidental disconnections of the power cord. The Combination Outlet C13 / C19 is also P-Lock compatible for additional protection
- Easily identify circuits with color-coded P-Lock tabs
- Streamline circuit and phase balancing with alternating outlets

### **Universal Power Distribution Unit (UPDU)**

The Vertiv<sup>™</sup> Geist<sup>™</sup> UPDU is the most versatile and robust rack power distribution unit on the market with a universal power input and pivoting connector that can mate to any geographically specific Facility Side Cable, simplifying management and enabling rapid IT infrastructure deployments.

The Vertiv<sup>™</sup> Geist<sup>™</sup> UPDU features a universal input and a detachable power cable meeting AC power specs that are common worldwide ranging from 16A to 63A, 120V to 415V with single and three phase power configurations.

Models available in 11kW and 22kW max power load capacities in both vertical and horizontal form factors with various receptacle combinations, monitoring and outlet control options.

#### **Benefits**

- Supply chain agility
- Global data centre interoperability
- Improve power efficiency with input and outlet level power monitoring
- Lower inventory management costs

### **Universal PDU**

Model	rPDU Type	rPDU Sub-Type	Horizontal / Vertical	PDU Ratings	Breaker Qty	Max kVA	Socket QTY/ Type	Max Operating Temp*	VI Director
UI30006L	Monitored	Unit Level	Vertical	16A 3~ WYE 230/415V max, 24A 3~ Delta 208V max, 48A 1~ 240V max	3	11kVA	(24) U-Lock C13, (12) U-Lock C19	60°C	YES
UI30007L	Monitored	Unit Level	Vertical	32A 3~ WYE 230/415V max, 48A 3~ Delta 208V max, 63A 1~ 240V max	6	22kVA	(24) U-Lock C13, (6) U-Lock C19	60°C	YES
UU30009L	Switched	Outlet Level	Vertical	16A 3~ WYE 230/415V max, 24A 3~ Delta 208V max, 48A 1~ 240V max	3	11kVA	(30) U-Lock C13, (6) U-Lock C19	60°C	YES
UU30010L	Switched	Outlet Level	Vertical	32A 3~ WYE 230/415V max, 48A 3~ Delta 208V max, 63A 1~ 240V max	6	22kVA	(18) U-Lock C13, (12) U-Lock C19	60°C	YES

## **Facility Side Cable**

Model	Plug Type	Rating	kVA (max)	kVA (max)
	Facility Side	Cable (FSC)	3 Breaker UPDU	6 Breaker UPDU
FSC3U002	30/32A, 3P+N+E (IP44)	30/32A, 230/400V WYE	11.0kVA**	22.0kVA
FSC3U001	16/20A, 3P+N+E (IP44)	16A, 230/400V WYE	11.0kVA	11.0kVA
FSC1U001	30/32A, 2P+E (IP44)	30/32A, 208/230V	7.3kVA	7.3kVA

Product chart shows limited spec information. For complete product details visit Vertiv.com

\*See data sheet for maximum operating temperature requirements

\*\*Max kVA limited by internal UPDU circuit breakers

## **Power Distribution**



The universal design enables a single unit to be purchased, installed and shipped to any location around the world, regardless of the regional power infrastructure.

The Vertiv<sup>™</sup> Geist<sup>™</sup> UPDU power configuration is determined by the connected Facility Side Cable. Change the cable to adjust the input power configuration.





30/32A, 3P+N+E (IP44) FSC3U002 30/32A, 2P+E (IP44) FSC1U001

16/20A, 3P+N+E (IP44) FSC3U001

## **Power Distribution**

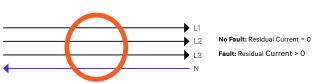
## **Rack PDU**

Model	rPDU Type	rPDU Sub-Type	Horizontal / Vertical	Volts	Amps	Max kVA	Plug Type	Socket QTY/ Type	Max Operating Temp*	VI Director
VP9559	Basic	Standard	н	230V	16A	3.6kVA	C20 Inlet	(10) C13 / (2) C19	45°C	N/A
VP7552	Basic	Standard	V	230V	16A	3.6kVA	C20 Inlet	(20) C13 / (4) C19	45°C	N/A
VP7553	Basic	Standard	V	230V	32A	7.3kVA	1P+N+E(IP44)	(20) C13 / (4) C19	45°C	N/A
VP7557	Basic	Standard	V	230/400V	16A	11kVA	3P+N+E (IP44)	(36) C13 / (6) C19	45°C	N/A
VP8858	Monitored	Unit Level	V	230V	16A	3.6kVA	C20 Inlet	(18) C13 / (2) C19	60°C	YES
VP8853	Monitored	Unit Level	V	230V	32A	7.3kVA	1P+N+E(IP44)	(36) C13 / (6) C19	60°C	YES
VP43903	Monitored	Unit Level	V	230V	32A	7.3kW	1P+N+E(IP44)	(36) Combination C13/C19	60°C	YES
VP8881	Monitored	Unit Level	V	230/400V	16A	11kVA	3P+N+E (IP44)	(36) C13 / (6) C19	60°C	YES
VP8886	Monitored	Unit Level	V	230/400V	32A	22kVA	3P+N+E (IP44)	(30) C13 / (12) C19	60°C	YES
GI30146	Monitored	Unit Level	V	230/400V	32A	22kVA	3P+N+E(IP44)	(36) Combination C13/C19	60°C	YES
VP8959EU3	Switched	Unit Level	V	230V	16A	3.6kVA	C20 Inlet	(21) U-Lock C13 / (3) U-Lock C19	60°C	YES
VP52101	Switched	Unit Level	н	230V	16A	3.6kVA	C20 Inlet	(12) Combination C13/C19	60°C	YES
VP8953	Switched	Unit Level	V	230V	32A	7.3kVA	1P+N+E(IP44)	(20) U-Lock C13 / (4) U-Lock C19	60°C	YES
VP59100	Switched	Unit Level	н	230V	32A	7.3kVA	1P+N+E	(12) Combination C13/C19	60°C	YES
GU30007L	Switched	Outlet Level	V	230V	16A	3.6kVA	1P+N+E(IP44)	(21)U-Lock C13 / (3) U-Lock C19	60°C	YES
GU30017L	Switched	Outlet Level	V	230V	32A	7.3kVA	1P+N+E(IP44)	(20) U-Lock C13 / (4) U-Lock C19	60°C	YES
GU30004L	Switched	Outlet Level	V	230/400V	16A	11kVA	3P+N+E (IP44)	(30) U-Lock C13 / (6) U-Lock C19	60°C	YES
GU30010L	Switched	Outlet Level	V	230/400V	32A	22kVA	3P+N+E (IP44)	(30) U-Lock C13 / (6) U-Lock C19	60°C	YES
VP4G9000	Monitored	Unit Level - RCM-B	V	230V	32A	7.3kVA	1P+N+E(IP44)	(36) Combination C13/C19	60°C	YES
VP4G8002	Monitored	Unit Level - RCM-B	V	230/400V	16A	11.0kVA	3P+N+E (IP44)	(36) Combination C13/C19	60°C	YES
VP4G9002	Monitored	Unit Level - RCM-B	V	230/400V	32A	22.0kVA	3P+N+E (IP44)	(36) Combination C13/C19	60°C	YES
VP7G9000	Switched	Outlet Level - RCM-B	V	230V	32A	7.3kVA	1P+N+E(IP44)	(24) Combination C13/C19	60°C	YES
VP7G8002	Switched	Outlet Level - RCM-B	V	230/400V	16A	11kVA	3P+N+E (IP44)	(24) Combination C13/C19	60°C	YES
VP7G9002	Switched	Outlet Level - RCM-B	V	230/400V	32A	22kVA	3P+N+E (IP44)	(36) Combination C13/C19	60°C	YES

WatchDog sensors are also suitable for Geist rPDUs..

### Protection for Your Customers' Most Valuable Assets with Residual Current Metering

Select Vertiv<sup>™</sup> Geist<sup>™</sup> rack PDU models support Residual Current Metering Type B (RCM-B). RCM-B continuously monitors the fault current of the power distribution within the IT rack. Customisable alarms provide immediate notifications of changes in residual current leakage allowing users to respond to a fault condition immediately to avoid potential catastrophic events such as critical equipment shutdown, electric shock, and electrical fires.



## RCM-B monitoring provides increased data centre availability and reduces the time required to confirm compliance with local requirements.

- Vertiv<sup>™</sup> rack PDU residual current metering is compliant with the EN62020 standard for total residual current metering of both AC and DC current
- RCM-B monitoring at the rPDU level provides permanent continuous residual current metering complying with DGUV regulation 3 and does not require system disconnection for testing
- The rack PDUs monitor per phase on three-phase rPDUs supporting the data centre standard EN50600

### **rPDU Models**

Visit the rPDU Finder on Vertiv.com for a complete list of available models.



### Vertiv<sup>™</sup> Intelligence Director

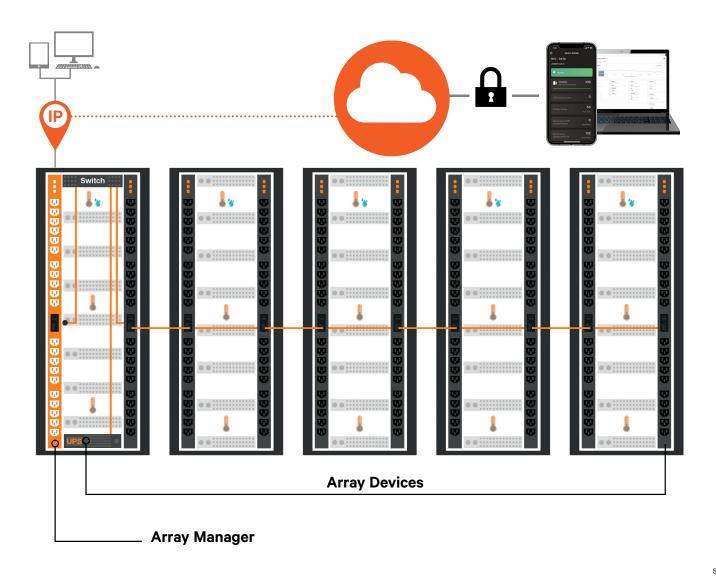
### PLUG-N-PLAY DATA CENTRE INFRASTRUCTURE ENABLING LIGHTNING FAST DEPLOYMENTS

The next generation of Vertiv<sup>™</sup> Geist<sup>™</sup> rPDUs offer enhanced monitoring and simplified networking with the introduction of Vertiv<sup>™</sup> Intelligence Director.

- On Monitored\* and Switched units, users have the ability to daisy chain up to 50 devices with a single IP address.
- Access data from all downstream rPDU and UPS\*\* devices from one rPDU.
- Users are able to aggregate data by grouping devices by rack or row.
- Downstream devices self-configure, significantly reducing deployment time.
- Securely transmit device data to the Vertiv<sup>™</sup> Intelligence cloud for anytime access to critical infrastructure information.

#### How it works

- **1.** Designate a Switched or Monitored unit as the array manager.
- 2. Connect up to 50 array devices through a network switch or by daisy chaining the rPDUs to the array manager.
- Securely access array device data via SNMP or the array manager user interface through a single IP address and bring the consolidated data in your private cloud.
- Bring your infrastructure data together with the option to connect to the Vertiv Intelligence cloud platform.



## **Power Distribution**



#### **Outlet Control**

Address unresponsive equipment or increase runtime of critical equipment upon power failure with outlet-level control.



## Upgradable & Hot-Swappable

Easily update your rPDU's monitoring capabilities to adapt to latest technologies and changing business needs.



#### Environmental Monitoring

Proactively monitor environmental conditions within the cabinet to ensure optimal operating conditions. A variety of sensors are available to meet your needs including temperature, humidity, airflow, door position, flood detection and more.



#### Combination C13/C19 Outlet

C13 and C19 in one. Provides the flexibility to connect C14 and C20 plugs in the same outlet. High retention colour coded outlets are P-Lock cable compatible.



## U-Lock

Secure power cords and avoid accidental disconnections. Receptacles are colour-coded by circuit for instant identification.



#### Vertiv<sup>™</sup> Intelligence Director ····· Daisy-chain up to 50 devices on a single IP address. Reduce deployment

single IP address. Reduce deployment time with self-configuration of downstream devices.

## High Temperature Grade

Up to 60°C working ambient variants for high temperature environments.



#### **Remote Connectivity**

Access the rPDU remotely via the network interface or serial connection to monitor power consumption and configure user-defined alert notifications to prevent downtime.

**Fault-Tolerant Daisy Chaining** Simplifies intelligent rPDU connectivity and ensures data is reported even when

a break in the network chain occurs.

## Visible Light Communication (VLC)

Optically transmit data from the rPDU display to your mobile device using VLC for quick and secure access to unit and power consumption data.

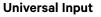


Small Footprint and Low Profile Breakers Compact size to install in tight spaces.

#### cy ely ge ISI

#### Power Monitoring 1% accuracy

Allows data centre managers to accurately monitor input and outlet level power usage with 1% monitoring accuracy tested to ANSI and IEC standards.



A universal input with a pivoting connector simplifies IT power infrastructure deployments by enabling users to standardise on a single rPDU globally.





### Vertiv<sup>™</sup> Geist <sup>™</sup> Rack Transfer Switch

Maintaining power from different sources to the critical infrastructure to eliminate downtime risk.



#### **Key Benefits**

- Automatic Power Switching
- Redundant Switching Topology
- <4-8ms Transfer Speeds
- Upgradeable and hot-swappable
- Fault-tolerant daisy-chaining with Rapid Spanning Tree Protocol (RSTP)
- IP aggregation- up to 50 devices
- With optional sensors, provides environmental monitoring
- Outlet Options:
   Combination outlet C13/C19
- Compatible with Vertiv Intelligence Director
- Five-year warranty with registration; three-year

#### Applications

- Banking
- Financial and Insurance
- Data Center/Colocation/Hosting
- Education
- Government
- Healthcare
- Military, Defense, Aerospace and Missile Telecom Retail and Wholesale

Model	Capacity	Input Voltage	Output Voltage	Output Options	Location	Height	Width	Depth	Weight
VA7U2100	1.9kW (120V), 3.3kW (208V), 3.6kW (230V)	16A or 20A	100-240V	(6) Combination C13/C19	Rack	44 mm	432 mm	457 mm	6.8 kg
VA4U2100	1.9kw (120V), 3.3kw (208V), 3.6kw (230V)	16A or 20A	100-240V	(12) Combination C13/C19	Rack	44 mm	432 mm	457 mm	6.8 kg
VA7G9201	7.3kW (230V)	200-240V	230V	(12) Combination C13/C19 Outlets	Rack	44 mm	432 mm	457 mm	8.62 kg
VA4G9100	7.3kW (230V)	200-240V	230V	(12) Combination C13/C19 Outlets	Rack	44 mm	432 mm	457 mm	8.62 kg

## Monitoring

Whether we're talking about battery monitoring, leak detection systems, temperature monitoring, sensor-level monitoring for harsh industrial environments, or complex data centre monitoring systems, we can all agree that this is an essential part of future-proofing and safe-guarding a critical facility from threats that range from faulty equipment and environmental conditions to cyber intrusions.

That is why we are investing heavily in a continuous learning process to not only detect, but also predict causes of downtime keeping your customer's assets safe against threats. Learn more below.





## Monitoring

#### Facilities and Monitoring Solutions SNMP and Web Monitoring

The Vertiv Intellislot Cards provide SNMP and web-based management to your UPS. The cards give you the power to monitor and control your Liebert® UPS from a Network Management System, with Vertiv<sup>™</sup> Power Assist or any other Vertiv monitoring software, or from any PC running Microsoft® Internet Explorer<sup>™</sup>. Connecting to your UPS is as simple as launching a web browser

#### Vertiv Geist Watchdog-15 and Vertiv Geist Watchdog-100

Vertiv Geist Watchdog Environmental Monitors allow users to securely observe conditions and receive alerts when user defined thresholds are breached.

#### **Key Benefits**

- Protect critical IT infrastructure by strategically monitoring data centre, server room and network closet environments.
- Expand monitoring capabilities with the addition of external sensors.
- View real time sensor data from a secure web interface and receive alerts via Email, SNMP, or Email-to-SMS.
- Receive alerts of out-of-range conditions to ensure they are addressed before resulting in downtime.
- Simple to install and configure, requires no special software other than a standard web browser.



## Vertiv Shutdown Software

#### Vertiv<sup>™</sup> Power Assist

Vertiv<sup>™</sup> Power Assist is a free software used to gracefully shutdown an IT device when the UPS battery backup experiences a threatening condition. The software notifies users of an event, displays key metrics and logs historical data. It is easy to install and protects computers from damage and data loss during a power event.

## Vertiv<sup>™</sup> Geist<sup>™</sup> Environmental Monitors

Model	Description	Services	Description
Environmental Monit	tors		
WATCHDOG 100-NPS	WATCHDOG 100-NPS (no power supply)	RCON-DE5-WDOG100	Distribution Emergency 5 YR Watchdog 100
WATCHDOG 100-P NPS	WATCHDOG 100-P NPS (POE & no power supply)	RCON-DE5-WDOG100	Distribution Emergency 5 YR Watchdog 100
WATCHDOG 100-P UK	WATCHDOG 100-P UK (POE & British power supply)	RCON-DE5-WDOG100	Distribution Emergency 5 YR Watchdog 100
WATCHDOG 100-P UN	WATCHDOG 100-P UN (POE & Univ. power supply)	RCON-DE5-WDOG100	Distribution Emergency 5 YR Watchdog 100
WATCHDOG 100-UK	WATCHDOG 100-UK (British power supply)	RCON-DE5-WDOG100	Distribution Emergency 5 YR Watchdog 100
WATCHDOG 100-UN	WATCHDOG 100-UN (Univ. Power supply)	RCON-DE5-WDOG100	Distribution Emergency 5 YR Watchdog 100
WATCHDOG 15-NPS	WATCHDOG 15-NPS (no power supply)	RCON-DE5-WDOG15	Distribution Emergency 5 YR Watchdog 15
WATCHDOG 15-P NPS	WATCHDOG 15-P NPS (POE & no power supply)	RCON-DE5-WDOG15	Distribution Emergency 5 YR Watchdog 15
WATCHDOG 15-P UK	WATCHDOG 15-P UK (POE & British power supply)	RCON-DE5-WDOG15	Distribution Emergency 5 YR Watchdog 15
WATCHDOG 15-P UN	WATCHDOG 15-P UN (POE & Univ. power supply)	RCON-DE5-WDOG15	Distribution Emergency 5 YR Watchdog 15
WATCHDOG 15-UK	WATCHDOG 15-UK (British power supply)	RCON-DE5-WDOG15	Distribution Emergency 5 YR Watchdog 15
WATCHDOG 15-UN	WATCHDOG 15-UN (Univ. Power supply)	RCON-DE5-WDOG15	Distribution Emergency 5 YR Watchdog 15
Sensors			
RTAFHD3-12	Remote environmental sensor, Temperature/Airflow/ Humidity/Dew Point, length 12 ft	-	-
RTAFHD3-20	Remote environmental sensor, Temperature/Airflow/ Humidity/Dew Point, length 20 ft	-	-
RTAFHD3-50	Remote environmental sensor, Temperature/Airflow/ Humidity/Dew Point, length 50 ft	-	
RTAFHD3-100	Remote environmental sensor, Temperature/Airflow/ Humidity/Dew Point, length 100 ft	-	-
WSCK-120-NPS	Water Sensing Cable Kit (analog), length 120 ft	-	-
WSCK-60-NPS	Water Sensing Cable Kit (analog), length 60 ft	-	-
WSCK-40-NPS	Water Sensing Cable Kit (analog), length 40 ft	-	-
WSCK-10-NPS	Water Sensing Cable Kit (analog), length 10 ft	-	-
SRT-100	Remote environmental sensor, Temperature, length 100 ft	-	-
SRT-12	Remote environmental sensor, Temperature, length 12 ft	-	-
SRT-20	Remote environmental sensor, Temperature, length 20 ft		
SRT-50	Remote environmental sensor, Temperature, length 50 ft	-	-
A2D-10	Analog to Digital Converter, length 10 ft	-	-
FS-15	Flood Sensor (analog), length 15 ft	-	-
RDPS	Dry Contact Sensor (analog), length 30 ft	-	-
PFS-100 UN	Power Failure Sensor	-	-
GTHD	Remote environmental sensor, Temperature/ Humidity/Dew Point, length 10 ft	-	-
GT3HD	Remote environ. sensor, Temp./Humidity/Dew Point + 2 additional Temp. probes, length 10 ft	-	-
SP-5	5-port splitter for digital Remote sensors	-	-



### **Vertiv Environet Alert**

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Vertiv<sup>™</sup> Environet<sup>™</sup> Alert provides an easy-to-use monitoring software solution that helps ensure the continuous power and cooling of your critical infrastructure. Get monitoring, alerting and trending at a price that's right for your business.

#### Benefits

- Increase your operational awareness and visibility into key assets
- Monitor your devices via streamlined integration with other business systems
- Improve the uptime of servers with proactive threat resolution
- Save time with easier setup, management and monitoring
- Identify trends to plan and optimize operations across all locations
- Ensure consistent processes and systems across data centers and server rooms
- Communicate with critical equipment via SNMP, Modbus TCI/IP and BACnet IP directly to Environet Alert
- Global language support increases the ability to utilize software across regions
- With floorplan navigation, each user can navigate to what is most important to them in each facility
- The Basic IT asset management provides visualization into space capacity at the rack level, along with a library containing IT asset details
- AD/LDAP support for simple user authentication
- Enhanced management features to show power data for multiple tenants

Use Environet Alert to monitor your critical infrastructure. Start today.

Requirement	Minimum	Recommended
	Windows 10 (64-bit)	
Operating System	Windows Server 2016	Windows Server 2019
	Windows Server 2019	
CPU (Intel or AMD)	4 CPU 2.0 GHz or Higher	(Intel or AMD) ≥6 CPU ≥2.2 GHz or Higher
RAM	8 GB	≥16GB
Disk Space	100 GB	≥300 GB
Disk I/O	15 MBps read/write speed	≥200 MBps read/write speed
Network	10/100 MBps	≥1GBps

### Watchdog 15-P



Environmental Monitor, on-board temperature, humidity and dew point sensors, capacity to add 4 additional external sensors, built-in PoE, US power supply included. Environmental factors like heat, humidity and moisture pose a severe threat to mission-critical infrastructure. These dangers can be minimized by incorporating an environmental monitoring solution to collect data and alert users of potential threats. Vertiv<sup>™</sup> Geist<sup>™</sup> Environmental Monitors allow users to securely observe conditions and receive alerts when user defined thresholds are breached

Part Number: Watchdog 15-P UN

#### Category: Monitor

Sub-Category: Environmental Monitor

#### **Benefits**

- Protect critical IT infrastructure by strategically monitoring data center, server room and network closet environments
- Expand monitoring capabilities with the addition of external sensors.
- View real time sensor data from a secure web interface and receive alerts via Email, SNMP, or Email-to-SMS
- Receive alerts of out-of-range conditions to ensure they are addressed before resulting in downtime
- Simple to install and configure, requires no special software other than a standard web browser

Activity LED	1
Idle LED	1
Power Over Eithernet (PoE)	Yes
Power Supply Compatible with these Systems Input: AC 100-240V, 50/60Hz Output: DC 6V, 2A	British Standard (BS1363), Europlug (CEE 7/16), Australia (AS3112), North America (NEMA 5-15P), Japan (JIS 8303)
Internal Temperature Sensor	-4°F to 185°F / -20°C to 85°C
Internal Temperature Measurement Accuracy	+/-0.5°F / ±0.3°C
Internal Humidity Sensor	0% to 100% (20% to 80%)
Internal Humidity Sensor Measurement Accuracy	+/-3% (+/-2)
Dew Point Measurement Range	-37°C to 75°C, +/-2.5°C OR -35°F to 167°F, +/-4.5°F (-20°C to 80°C and 20-80%RH)
Network Connection	Ethernet via RJ45
Network Protocols Supported and Data Access Formats	HTTP, HTTPS (SSL/TLS), SMTP, DHCP, ICMP, TCP/IP, HTML (Desktop), SNMP v1/v2c, XML, CSV, JSON
Reboot Button	Yes
Remote Sensor RJ Connection Jacks	2 (Supports up to 4 Sensors)
Product Warranty	5-year limited warranty if registered within 120 days of purchase, otherwise warranty defaults to 3 years
Certification/ Agency Approvals	RoHS Compliant
Certification/ Agency Approvals	FCC Part 15 Class A Conformance
Certification/ Agency Approvals	Complies with EN 55032 and EN 55024
Certification/ Agency Approvals	CE Marked
Chassis Dimensions (HxWxD)	1.29in x 5.22in x 1.72in / 33mm x 133mm x 45mm



#### Watchdog 100-P



Environmental Monitor, on-board temperature, humidity and dew point sensors, one relay contact, capacity to add 8 additional external sensors (4 RJ12 and 4 Dry Contact/ 0-5V), built-in PoE, US power supply included. Environmental factors like heat, humidity and moisture pose a severe threat to mission-critical infrastructure. These dangers can be minimized by incorporating an environmental monitoring solution to collect data and alert users of potential threats. Vertiv<sup>™</sup> Geist<sup>™</sup> Environmental Monitors allow users to securely observe conditions and receive alerts when user defined thresholds are breached.

Part Number: Watchdog 100-P UN

#### Category: Monitor

Sub-Category: Environmental Monitor

#### **Benefits**

- Protect critical IT infrastructure by strategically monitoring data center, server room and network closet environments.
- Expand monitoring capabilities with the addition of external sensors.
- View real time sensor data from a secure web interface and receive alerts via Email, SNMP, or Email-to-SMS.
- Receive alerts of out-of-range conditions to ensure they are addressed before resulting in downtime.
- Simple to install and configure, requires no special software other than a standard web browser

Activity LED	1
Idle LED	1
Power Over Eithernet (PoE)	Yes
Power Supply Compatible with these Systems Input: AC 100-240V, 50/60Hz Output: DC 6V, 2A	British Standard (BS1363), Europlug (CEE 7/16), Australia (AS3112), North America (NEMA 5-15P), Japan (JIS 8303)
Internal Temperature Sensor	4°F to 185°F / -20°C to 85°C
Internal Temperature Measurement Accuracy	+/-0.5°F / ±0.3°C
Internal Humidity Sensor	0% to 100% (20% to 80%)
Internal Humidity Sensor Measurement Accuracy	+/-3% (+/-2 )
Dew Point Measurement Range	-37°C to 75°C, +/-2.5°C OR -35°F to 167°F, +/-4.5°F (-20°C to 80°C and 20-80%RH)
Network Connection	Ethernet via RJ45
Network Protocols Supported and Data Access Formats	HTTP, HTTPS (SSL/TLS), SMTP, DHCP, ICMP, TCP/IP, HTML (Desktop), SNMP v1/v2c, XML, CSV, JSON
Reboot Button	Yes
Remote Sensor RJ Connection Jacks	2 (Supports up to 4 Sensors)
Analog Ports	4 Dry Contact / 0-5VDC
Output Relays	1
Product Warranty	5-year limited warranty if registered within 120 days of purchase, otherwise warranty defaults to 3 years
Certification/ Agency Approvals	RoHS Compliant
Certification/ Agency Approvals	FCC Part 15 Class A Conformance
Certification/ Agency Approvals	Complies with EN 55032 and EN 55024
Certification/ Agency Approvals	CE Marked
Chassis Dimensions (HxWxD)	1.61in x 8.50in x 2.51in / 41mm x 216mm x 64mm

## **Thermal Management**

Get efficient and reliable heat management and humidity control solutions geared to your specific size, location and business goals.

Your customers' mission-critical facilities need the very best in precision cooling, and we deliver with the industry's most advanced equipment and controls, low operating costs and unparalleled expertise.



#### **Thermal Management**

Vertiv<sup>™</sup> Liebert<sup>®</sup> CRV





#### **Row-Based Cooling**

Direct Expansion (DX) Cooling Unit up to 22 kW or from 13-22 kW Chilled Water (CW) Cooling Unit up to 33 kW

#### **Key Benefits**

## The Vertiv<sup>™</sup> Liebert<sup>®</sup> CRV Combines the Best Footprint Cooling Capacity with the Highest Efficiency

- Space-saving, flexible row-based design offers more valuable floorspace for critical IT deployment
- Scalable cooling from 20-100% capacity with load matching controls provides lower energy consumption and operational costs
- Improved cold-air distribution allows users to eliminate hot spots and increase efficiency
- Simultaneous top and bottom connections allow for greater flexibility during installation for various building configurations
- Advanced controls and wellness alerts provide a simplified operation and increased peace of mind

#### **Direct expansion version**

- DC Inverter Scroll Compressor
- Electronic Expansion Valve
- Variable Speed EC Fans

#### **Chilled water version**

- Field Adjustable 2way / 3way valve
- 0-10V continuously controlled actuators
- Variable Speed EC Fans

#### Applications

- Banking, Financial and Insurance
- Broadcast and Entertainment
- Data Centre/Colocation/Hosting
- Education
- Government
- Telecom

## **Technical Specifications**

Technical Data	CRD102	CR025	CR030
Net Sensible Cooling Capacity*	11kW	22 kW	33kW
Version	Air Cooled DX	Air Cooled DX	Chilled Water
Input Voltage	230V, 1phase, 50-60Hz	400V, 3phase, 50Hz	230V, 1phase, 50Hz
Humidifier	No	Yes	Yes
Refrigerant	R410A	R410A	Chilled Water
Compressor	DC Inverter, Rotary	DC Inverter, Scroll	-
CW Valve	_	-	Field Adjustable 3way/2way, with 0-10V actuator
Controls	Vertiv™ iCOM™ Control with 7" touchscreen display and monitoring of up to 10 racks	Vertiv™ iCOM™ Control with Graphical Display and monitoring of up to 10 racks	Vertiv™ iCOM™ Control with Graphical Display and monitoring of up to 6 racks
Communications	Modbus, SNMP, Web monitoring, E-m	ail notifications about alarms	

\* Return air temperature 37°C, 24% Relative Humidity, 35°C Outdoor Temperature for CR012 and CR025 Return air temperature 37°C, 24% Relative Humidity, 10/15°C chilled water temperatures for CR030

#### Dimensions

Height	2000/2200* mm	2000/2200* mm	2000/2200* mm
Width	300 mm	300 mm	300 mm
Depth	1100/1200* mm	1100/1200* mm	1100/1200* mm

\* with field installed frame extensions

#### Suitable Condenser

Up to 35°C Ambient Temperature	HCR33	HCR33	-
Up to 46°C Ambient Temperature	HCR43	HCR51	-



## **Technical Specifications - Direct Expansion**

	CRD10	CRD25	CRD35
Net Sensible Cooling Capacity* (kW)	10	25	35
Capacity Modulation Range	20-100%	20-100%	20-100%
Rated Airflow (m3/h)	3200	5200	8000
Heating Capacity (kW)	3	3	6
Humidification Capacity (kg/h)	N/A	2	2
Air Filtration	G4	G4	G4
Remote Monitoring		HTTP / SNMP / Modbus / BACnet	
Piping and Cabling connections	Top & Bottom	Top & Bottom	Top & Bottom
Dimensions (W x D x H), mm	300 x 1132 x 2000	300 x 1132 x 2000	600 x 1132 x 2000
Weight, kg (lbs)	230 (509)	272 (599)	358 (789)
Refrigerant/Coolant	R410A	R410A	R410A
*Test conditions: 35°C, 24% Return Air, 35°C outdoor			
Environmental Requirements			
Operating Temperatures, °C (°F)		24 to 45 (75 to 113)	24 to 45 (75 to 113)
Storage Temperatures, °C (°F)		-40 to 70 (-40 to 158)	-40 to 70 (-40 to 158)
Outdoor Air Temperature, °C (°F)	-15 to 45 (5 to 113)	-20 to 52 (-4 to 125)	-20 to 52 (-4 to 125)
With low ambient kit, °C (°F)	-34 to 45 (-29 to 113)	-35 to 48 (-31 to 118)	-35 to 48 (-31 to 118)
Max Piping Length, m (ft)	91 (298)	120 (393)	120 (393)
Electrical Requirements			
Input Voltage	230V, 1ph, 50-60Hz	400V, 3Ph, 50Hz	400V, 3Ph, 50Hz
Power Input	3.2	6.99	8.49
FLA (A)	38	30	40
Condenser Specifications	CCD10	CCD25	CCD35
Width, mm (in)	745 (29.3)	1562 (61.5)	2362 (93)
Depth, mm (in)	1300 (51.2)	830 (32.7)	830 (32.7)
Height, mm (in)	450 (17.7)	1272 (50.1)	1272 (50.1)
Weight, kg (lb)	56 (123)	120 (264.6)	175 (385.8)

## **Technical Specifications - Chilled Water**

	CRC30	CRC60	CR040	CR050
Net Sensible Cooling Capacity* (kW)	27.3	39.5	40	50
Capacity Modulation Range	0-100%	0-100%	0-100%	0-100%
Rated Airflow (m3/h)	5100	7700	5650	7400
Heating Capacity (kW)	3	-	6	N/A
Humidification Capacity (kg/h)	2	-	2	N/A
Air Filtration	G4	G4	G4/F5	G4/F5
Remote Monitoring		HTTP / SNMP / M	Modbus / BACnet	
Piping and Cabling connections	Top & Bottom	Top & Bottom	Top & Bottom	Top & Bottom
Chilled Water Connection size	Rp 1-1/4	Rp 1-1/4	Rp 1-1/4	Rp 1-1/4
Dimensions (W x D x H), mm	300 x 1132 x 2000	300 x 1132 x 2000	600 x 1175 x 2000	600 x 1175 x 2000
Weight, kg (lbs)	242 (533.5)	235 (518)	365 (804)	365 (804)
Refrigerant/Coolant	Chilled Water	Chilled Water Chilled Water		Chilled Water
*Test Conditions: 37C, 24% Return Air, 10/15C	Chilled Water Temp			
**Test conditions CRC60: 38°C, 24% Return Ai	r, 15/20, 5°C Chilled Water Temp			
Environmental Requirements				
Operating Temperatures, °C (°F)	18 to 45 (64 to 113)	27 to 45 (80 to 113)	18 to 40 (64 to 104)	18 to 40 (64 to 104)
Storage Temperatures, °C (°F)	-40 to 70 (-40 to 158)	-40 to 70 (-40 to 158)	-20 to 50 (-4 to 122)	-20 to 50 (-4 to 122)
Electrical Requirements				
Input Voltage	400V, 3Ph, 50Hz	230V, 1ph, 50-60Hz	400V, 3Ph, 50Hz	400V, 3Ph, 50Hz
Power Input*	1.06	1.9	1.24	1.89
FLA (A)	14	13	3* / 11.7**	4.5

\*\* With humidifier and reheat



## Thermal Management Vertiv<sup>™</sup> VRC IT Rack Cooling Unit



### **Rack Cooling Unit**

Designed to satisfy cooling requirements for small server rooms, network closets, and edge applications up to 3500 watts per cabinet, the Vertiv<sup>™</sup> VRC IT rack cooling unit packs powerful, scalable and energy-efficient cooling into a compact unit. It fits into most standard 19-inch network racks, freeing up valuable floor space. It is available in Self-contained or Split version to fit different building architectures.

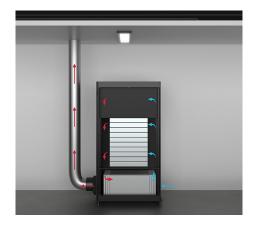
#### **Key Benefits**

- Space saving
- Available in Split or Self-contained version to fit different building architectures
- Easy plug-and-play installation of the Self-contained version
- Lowers energy consumption
- Practical accessories included in the packaging display, condensate pump, SNMP/Modbus monitoring card and installation accessories
- Peace of mind through easy monitoring and management

## Thermal Management Vertiv<sup>™</sup> VRC Self-Contained



- Reliably and efficiently satisfies cooling requirements for small room and edge applications up to 3.5 kW per cabinet
- Fits into standard racks, leaving the valuable floor space free in small IT rooms
- Reduces capital expenses and deployment costs with simple installation and no need to run refrigerant piping between an outdoor and indoor unit
- Improves efficiency and reduces operating costs with real-time cooling and capacity adjustment
- Provides peace of mind and ease of management through remote monitoring capabilities
- 2 years standard warranty



## Thermal Management

SKU#	VRC100KIT	VRC101KIT	VRC102KIT
Region	Americas	Americas	Europe, Middle East and Africa
Input Voltage	120V/1Ph/60Hz	208V/1Ph/60Hz	230V/1Ph/50Hz
Net Sensible Cooling Capacity*	3500W (12000BTU/h)	3500W (12000BTU/h)	3500W (12000BTU/h)
Capacity Modulation	25 - 100%	25 - 100%	25 - 100%
Power Plug	5-20P	6-20 P	Type I plug (IEC60320)
Total Current	16.5 Amps	13.1 Amps	11.5 Amps
Refrigerant	R410A	R410A	R410A
Communications	SNMP, Modbus RTU	SNMP, Modbus RTU	SNMP, Modbus RTU
Approvals	UL	UL	CE
Standard Warranty	2 years	2 years	2 years
Occupied U space	10U	10U	10U
Dimensions (H x D x W)	17.3 x 38.5 x 17.4 in (439 x 978 x 442 mm)	17.3 x 38.5 x 17.4 in (439 x 978 x 442 mm)	17.3 x 38.5 x 17.4 in (439 x 978 x 442 mm)
Weight	161 lbs (73kg)	161 lbs (73kg)	165lbs (75kg)

 $^{*}$  Air Temperature to IT equipment 21°C (70°F), Heat Rejection inlet air temperature 25°C (77°F)

## Services

Service Offering	Description	Included
Preferred Warranty	Two-year protection program for Vertiv™ VRC. It can be purchased only at the point of sale, it is valid throughout the two-year warranty period	<ul> <li>Coverage of faulty parts as per standard warranty terms</li> <li>Labour and travel coverage as per standard warranty terms</li> <li>8 working hours response time</li> <li>One annual preventive maintenance visit</li> <li>24x7 access to professional helpline</li> </ul>
Integrated Warranty Extension	One-year after-warranty protection program	<ul> <li>Coverage of faulty parts excluding consumables</li> <li>Labour and travel coverage</li> <li>8 working hours response time</li> <li>One annual preventive maintenance visit</li> <li>24x7 access to professional helpline</li> </ul>
Additional Services	Additional services available on 8x5 or 24x7 basis	<ul><li>Electrical and mechanical installation</li><li>Start-up</li></ul>



## Thermal Management Vertiv<sup>™</sup> VRC Split





- Reliably and efficiently satisfies cooling requirements for small room and edge applications up to 3.5 kW per cabinet, regardless of building architecture and independent of a building cooling system
- Requires only 6U due to space-saving form factor that leaves the valuable floor and rack space free in small IT rooms
- Lowers energy consumption and reduces operating costs due to real-time cooling and capacity adjustments
- Offers installation flexibility with options for mounting at the top or bottom of standard racks
- Provides peace of mind and simplified management with unit-level or remote monitoring capabilities
- 2 years standard warranty

## **Thechnical Specifications**

SKU#	VRC202KIT-N	VRC202KIT-L
Indoor unit model	VRC202KIT	VRC202KIT
Outdoor unit model	VRC302KIT	VRC352KIT
Minimum Outdoor Operating Temperature	-15°C (+5°F)	-34°C (-29°F)
Region	Europe, Middle East and Africa	Europe, Middle East and Africa
Input Voltage	230V/1Ph/50-60Hz	230V/1Ph/50-60Hz
Net Sensible Cooling Capacity*	3800W (13000BTU/h)	3400W (11600BTU/h)
Capacity Modulation	25 - 100%	25 - 100%
Power connection	Hard Wired (terminal block)	Hard Wired (terminal block)
Total Current (indoor / outdoor)	1,5A / 7,2A	1,5A / 7,2A
Refrigerant	R410A	R410A
Communications	SNMP, Modbus RTU	SNMP, Modbus RTU
Approvals	CE	CE
Standard Warranty	2 years	2 years
Occupied U space	6U	6U
Dimensions Indoor (H x D x W)	264 x 602 x 442 mm	264 x 602 x 442 mm
Dimensions Outdoor (H x D x W)	527 x 282 x 786mm	527 x 282 x 1158mm
Weight (indoor / outdoor)	23kg/44kg	23kg/68kg

\*Air Temperature to IT equipment 21°C (70°F), Outdoor air temperature 35°C (95°F)

## Services

Service Offering	Description	Included
		Coverage of faulty parts as per standard warranty terms
	Two-year protection program for Vertiv™ VRC. It can	Labour and travel coverage as per standard warranty terms
Preferred Warranty	be purchased only at the point of sale, it is valid	8 working hours response time
	throughout the two-year warranty period	One annual preventive maintenance visit
		24x7 access to professional helpline
		Coverage of faulty parts excluding consumables
	One-year after-warranty protection program	Labour and travel coverage
Integrated Warranty Extension		8 working hours response time
		One annual preventive maintenance visit
		24x7 access to professional helpline
Additional Convince	Additional convises evaluate on QVE or QVV7 basis	Electrical and mechanical installation
Additional Services	Additional services available on 8x5 or 24x7 basis	• Start-up

## Vertiv<sup>™</sup> VRC-S

## Deploy a Comprehensive Edge Micro Data Centre Solution in Days

Vertiv<sup>™</sup> VRC-S is a micro data centre solution fully industrystandard assembled at the factory and designed specifically for IT edge applications. Available in various configurations, the Vertiv VRC-S is delivered in days and installed in hours. Choose from four different cabinet sizes with two different cooling methods (split and self-contained) with back-up, and the option to integrate a UPS. An intelligent switching PDU including monitoring of all components and a comprehensive software package complete the offer.





### Vertiv<sup>™</sup> VRC-S Key Features and Benefits

Features	Benefits
A completely prefabricated micro data centre with your choice of 24 standard models.	<b>Planning effort is minimised</b> All components are guaranteed to work seamlessly to meet your requirements. The system is ready to ship in days.
Vertiv <sup>™</sup> VR rack-based durable IT cabinet available in a range of four sizes with 1000 kg of Dynamic load	Adaptable to IT space requirements Choose the cabinet size you need to optimally support your IT equipment; the enclosed system enhances security and cooling efficiency.
Vertiv adaptive Vertiv <sup>™</sup> VRC rack cooling system with 3.5kW cooling capacity and two heat rejections	Low operating costs due to efficient cooling The cooling system adapts its capacity to the IT heat, thus reducing energy costs. The heat remains inside or is removed through the building shell.
Backup fan system controlled by cooling system independent sensors	<b>Increased availability through backup cooling</b> Generate additional protection with emergency airflow provided during cooling outages, extending your time for a controlled shutdown or further ensuring IT equipment availability.
Intelligent Vertiv™ Geist™ Rack PDU with sensors, switched on an outlet level	Higher reliability by monitoring and remote control Monitor and control your IT equipment on power outlet level for improved visibility, serviceability, reliability, and availability.
Vertiv™ Intelligence Director Monitoring software	<b>Reduced labour costs through monitoring optimisation</b> Remote control and monitoring of all installed components, consolidated in one software and one IP address, reduces the workload of IT staff.
Single-phase online double conversion 6 kVA Liebert® GXT5 UPS	Power Continuity - Highest availability for your IT assets Application continuity is maintained during a utility power outage, as the UPS powers the cooling system and the IT assets, without interruption.
3 years warranty for the complete system with product registration	<b>Reduction of maintenance costs</b> Protect your entire system for complete peace of mind.

### Select Your Vertiv<sup>™</sup> VRC-S

The Vertiv VRC-S includes all the components of a state-of-the-art micro data centre, fully factory assembled to work seamlessly to meet your requirements and simplify IT management for your edge applications. Make your selection to customise your micro data centre.

#### Cabinet size:

- Height 2000 mm, Width 800 mm, Depth 1200mm, Total Rack Space 42 U
- Height 2000 mm, Width 600 mm, Depth 1200mm, Total Rack Space 42 U
- Height 2265 mm, Width 600 mm, Depth 1200mm, Total Rack Space 48 U
- Height 2265 mm, Width 800 mm, Depth 1200mm, Total Rack Space 48 U

### Select Your Vertiv<sup>™</sup> VRC-S

#### 3.5kW IT cooling:

- Self-contained: Heat rejection inside the building, e.g. in a large manufacturing or warehouse hall, or in a suspended ceiling.
- Split cooling: Heat rejection through a refrigerant pipe through the building shell to the included pre-filled outdoor condenser.
- Minimum ambient air down to -15 °C (standard)
- Minimum ambient air down to -34 °C (low ambient)

#### UPS:

 With or without a Single phase online double conversion 6 kVA Liebert\* GXT5 UPS

#### Recommended Vertiv<sup>™</sup> VR Rack Accessories:

- Additional batteries to increase UPS backup time
- Additional blanking panels to improve isolation of the cool air in the front of the rack are highly recommended
- Cable management accessories to keep cables organised and prevent cables from restricting airflow or causing safety hazards
- Vertiv<sup>™</sup> Geist<sup>™</sup> SwitchAir<sup>™</sup> airflow management solution for network equipment that is not front-breathing
- Establish a second power path for downtime minimisation with an additional PDU and UPS
- Advanced access control with a card reader lock

## **Technical Specifications**

Vertiv™ VRC-S part number:	VRCS3350-230VU	VRCS3350-230V	VRCS3350-230VSU	VRCS3350-230VS	VRCS3350-230VSLU	VRCS3350-230VSI
Cabinet size		Height 2000 mm, Width 800 mm, Depth 1200mm, Total Rack Space 42 U				
Usable rack space [U]	27	32	31	36	31	36
Usable payload [kg]	806	877	858	929	858	929
Configured system weight [kg]	392	321	341	270	341	270
Shipping weight [kg]	492	421	492	406	507	421
Intput Voltage and Connection		230 V / 1Ph / 50 Hz; IEC60309 2P+E, 32 A, 250 V Splashproof IP44; 2,5 m cable (outlet at the bottom)				m)
Cooling Unit	Vertiv <sup>™</sup> VRC s	elf-contained	Vertiv™ V (-15°C minimum		Vertiv™ \ (-34°C minimum	
Model Number	VRC10	2KIT	VRC202	2KIT-N	VRC202KIT-L	
Cooling Capacity*	3,5k	W	3,8k	W	3,4	٢W
Average sound pressure**	57,8 dB (A	A)@1m		52,0 d	B(A)@1m	
UPS	Liebert® G	KT5 6kVA	Liebert® G	KT5 6kVA	Liebert® G	XT5 6kVA
UPS Model Number	GXT5- 6000IRT5UXLE	No	GXT5- 6000IRT5UXLE	No	GXT5- 6000IRT5UXLE	No
PDU Model Number	GU30017L*****	GU30017L	GU30017L*****	GU30017L	GU30017L*****	GU30017L
Communication protocols	DH	DHCP, HTTP, HTTPS, IPv4, IPv6, LDAP, NTP, RADIUS, RSTP, SSH, SMTP, SNMP (v1/v2c/v3), Syslog, TACACS+				
Certificated		CE, RoHS, REACH				

Vertiv™ VRC-S part number:	VRCS3300-230VU	VRCS3300-230V	VRCS3300-230VSU	VRCS3300-230VS	VRCS3300-230VSLU	VRCS3300-230VSL
Cabinet size		Height 2000 mm, Width 600 mm, Depth 1200mm, Total Rack Space 42 U				
Usable rack space [U]	27	32	31	36	31	36
Usable payload [kg]	806	877	858	929	858	929
Configured system weight [kg]	347	276	296	225	296	225
Shipping weight [kg]	434	363	449	378	464	393
Intput Voltage and Connection	:	230 V / 1Ph / 50 Hz; IEC	60309 2P+E, 32 A, 250 V	Splashproof IP44; 2,5 m	cable (outlet at the bottom	)
Cooling Unit	Vertiv <sup>™</sup> VRC s	elf-contained	Vertiv™ V (-15°C minimum		Vertiv™ V (-34°C minimum	
Model Number	VRC10	D2KIT	VRC202KIT-N		VRC202KIT-L	
Cooling Capacity*	3,5	٢W	3,81	kW	3,41	(W
Average sound pressure**	57,8 dB (/	A)@1m		52,0 dB	(A)@1m	
UPS	Liebert® G	Liebert® GXT5 6kVA		XT5 6kVA	Liebert® G	XT5 6kVA
UPS Model Number	GXT5-6000IRT5UXLE	No	GXT5- 6000IRT5UXLE	No	GXT5- 6000IRT5UXLE	No
PDU Model Number	GU30017L*****	GU30017L	GU30017L*****	GU30017L	GU30017L*****	GU30017L
Communication protocols	DHC	DHCP, HTTP, HTTPS, IPv4, IPv6, LDAP, NTP, RADIUS, RSTP, SSH, SMTP, SNMP (v1/v2c/v3), Syslog, TACACS+				
Certificated		CE, RoHS, REACH				

Vertiv™ VRC-S part number: V

VRCS3307-230VU VRCS3307-230V

VRCS3307-230VSU VRCS3307-230VS

VS VRCS3307-230VSLU VRCS3307-230VSL

Cabinet size	Height 2265 mm, Width 600 mm, Depth 1200mm, Total Rack Space 48 U					
Usable rack space [U]	33	38	37	42	37	42
Usable payload [kg]	806	877	858	929	858	929
Configured system weight [kg]	383	312	332	261	332	261
Shipping weight [kg]	470	399	455	384	470	399
Intput Voltage and Connection	2	30 V / 1Ph / 50 Hz; IEC6	0309 2P+E, 32 A, 250 V S	plashproof IP44; 2,5 m ca	ble (outlet at the bottom)	)
Cooling Unit	Vertiv™ VRC s	elf-contained		/RC Split ambient temp.)		/RC Split ambient temp.)
Model Number	VRC10	2KIT	VRC202KIT-N		VRC202KIT-L	
Cooling Capacity*	3,51	W	3,8kW		3,4	kW
Average sound pressure**	57,8 dB (/	A)@1m		52,0 dB (	A)@1m	
UPS	Liebert® G	XT5 6kVA	Liebert® G	XT5 6kVA	Liebert® G	XT5 6kVA
UPS Model Number	GXT5-6000IRT5UXLE	No	GXT5- 6000IRT5UXLE	No	GXT5- 6000IRT5UXLE	No
PDU Model Number	GU30017L*****	GU30017L	GU30017L*****	GU30017L	GU30017L*****	GU30017L
Communication protocols	DHC	P, HTTP, HTTPS, IPv4, IP	v6, LDAP, NTP, RADIUS, I	RSTP, SSH, SMTP, SNMP	(v1/v2c/v3), Syslog, TACA	CS+
Certificated		CE, RoHS, REACH				

## Vertiv<sup>™</sup> VRC-S



Vertiv™ VRC-S part number:	VRCS3357-230VU	VRCS3357-230V	VRCS3357-230VSU	VRCS3357-230VS	VRCS3357-230VSLU	VRCS3357-230VSL	
Cabinet size		Height	2265 mm, Width 800 mm	n, Depth 1200mm, Total F	ack Space 48 U		
Usable rack space [U]	33	38	37	42	37	42	
Usable payload [kg]	806	877	858	929	858	929	
Configured system weight [kg]	410	399	359	288	359	288	
Shipping weight [kg]	510	439	495	424	510	439	
Intput Voltage and Connection		230 V / 1Ph / 50 Hz; I	EC60309 2P+E, 32 A, 250	) V Splashproof IP44; 2,5	m cable (outlet at the botto	m)	
Cooling Unit	Vertiv <sup>™</sup> VRC se	Vertiv <sup>™</sup> VRC self-contained Vertiv <sup>™</sup> VRC split (-15°C minimum ambient temp.)			Vertiv™ VRC Split (-34°C minimum ambient temp.)		
Model Number	VRC102	2KIT	VRC202KIT-N		VRC202KIT-L		
Cooling Capacity*	3,5k <sup>1</sup>	N	3,8	škW	3,4	4kW	
Average sound pressure**	57,8 dB (A	)@1m		52,0 0	IB (A) @ 1 m		
UPS	Liebert® GX	T5 6kVA	Liebert® 0	GXT5 6kVA	Liebert® (	GXT5 6kVA	
UPS Model Number	GXT5-6000IRT5UXLE	No	GXT5- 6000IRT5UXLE	No	GXT5- 6000IRT5UXLE	No	
PDU Model Number	GU30017L*****	GU30017L	GU30017L*****	GU30017L	GU30017L*****	GU30017L	
Communication protocols	DH	DHCP, HTTP, HTTPS, IPv4, IPv6, LDAP, NTP, RADIUS, RSTP, SSH, SMTP, SNMP (v1/v2c/v3), Syslog, TACACS+					
Certificated		CE, RoHS, REACH					

Cooling unit	Vertiv™ VRC Rack Cooling System			
Cooling method	self-contained	split system		
Model number	VRC102KIT	VRC202KIT-N	VRC202KIT-L	
Minimum Outdoor Operating Temperature	N/A	-15°C	-34 °C	
Piping length between indoor and outdoor unit	N/A	max. 30 m***	max. 30 m***	
Condenser air duct length	3,8 m	N/A	N/A	
Net sensible cooling capacity*	3,5 kW	3,8 kW	3,4 kW	
Capacity modulation	25 - 100 %	25 - 100 %	25 - 100 %	
Full load amperage (total / indoor / outdoor)	11,5 A	8,0 A / 1,5 A / 6,5 A	8,0 A / 1,5 A / 6,5 A	
Max. power input	1,86 kW	1,33 kW	1,33 kW	
EER	1,88	2,63	2,56	
Refrigerant R410 (pre-charged)	720 g	1300 g	4000 g	
Cooling air flow	750 m³/h	750 m³/h	750 m³/h	
Occupied U space	10 U	6 U	6 U	
LCD Screen included	YES	YES	YES	
Outdoor condenser Unit H, W, D [mm]	N/A	527, 282, 786	527, 282, 1158	

UPS	Integrated Liebert® GXT5-6000IRT5UXLE	PDU	Integrated rPDU GU30017L
Туре	Online double conversion	Туре	Switched and monitored on outlet level
Rating	6000 VA (IT load according max. cooling capacity)	Input	200 - 240 VAC / 32 A / 1Ph / 50 Hz
Occupied U space	5 U	Position	Vertical
Operating frequency	50 or 60 Hz (factory-default is 50 Hz)	Receptacles	(20) Locking IEC 60320 C13, (4) Locking IEC 60320 C19 ****
User-configurable AC	200/208/220/230/240 VAC (Factory-default is 230 VAC)	Communication	Embedded Vertive Intelligence Director
voltage		Input Monitoring	Phase (A) Monitoring (kWh, W, VA, PF, V, A)
AC-AC Efficiency	94%	Outlet Monitoring	Each outlet (kWh, W, VA, PF, V, A)
Waveform	Sine wave	Power Management	Individual outlet switching, timing, delay, sequence
Battery	16 x 12 V x 9,0 Ah	Over Current	
Output receptacles	(6) IEC 60320 C13, (2) IEC 60320 C19 ****	Protection (2) 16A Single Pole Magnetic Breakers (5kAIC Rated)	

\*Air Temperature to IT equipment 21°C, Outdoor air temperature 35°C \*\* constant 100% heat load \*\*\* extension on request \*\*\*\* (2) IEC C13 outlets used by backup fan and condensate pump \*\*\*\*\* hard hardwired connection between UPS and PDU

## Vertiv<sup>™</sup> Avocent<sup>®</sup> ITS Solutions

# These solutions enable small to enterprise sized organisations to reduce costs, increase security and optimise availability and productivity.

This portfolio includes hardware and software solutions. The hardware solutions enable secure, auditable remote access, control and management of critical devices through patented, out-of-band technology. This remote access can be to any distance and can scale to high definition audio and video for specialist verticals.

The software solutions deliver efficiencies to the data centre specialist by centralising management of all IT devices. Furthermore, when documenting the data centre, managing and planning capacity, we offer organisations a single source of truth tool where they can manage all aspects of this efficiently.

#### To make it easier, we have divided our products into two sections, as follows:

- Section 1 Focuses on customers who want desktop and server room solutions
- Section 2 Focuses on customers who require enterprise level solutions to meet the demanding business challenges which require an agile IT infrastructure



# **SECTION 1**

# Desktop and Server Room IT Management Solutions

Our range of products enables the end user to:

- Efficiently access control and manage the server room without the need to physically be there
- Help remove IT assets from unsuitable work areas, like hospitals, factories, warehouses, clean rooms, shops
- De-clutter work places where users require access to multiple PCs, but do not want to use multiple displays, keyboards and mice
- Efficiently access server room assets and maximise server room space

#### **Desktop Solutions**

Vertiv<sup>™</sup> Avocent<sup>®</sup> KVM

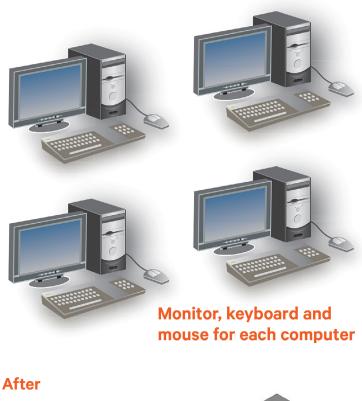
Having a dedicated display/keyboard/mouse for accessing each PC, can take up a lot of space and also cause unnecessary hardware cost. The whole process can become a costly mess.

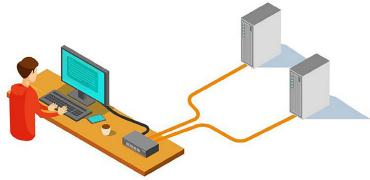
This is where the Vertiv Avocent<sup>®</sup> Keyboard, Video, Mouse (KVM) Appliance comes in: our switch makes access possible to multiple PCs with only one set of peripherals and no software. With the Vertiv Avocent KVM Switch, the end user can immediately shift between multiple devices with high video resolutions and audio and USB sharing, without configuring settings.

Simply plug in our device and benefit from:

- More space
- Less costs (no need to invest in several peripherals)
- Increased efficiency easier to switch between devices
- A more productive work environment

#### **Before**







#### Desktop Solutions Cybex<sup>™</sup> SC800 and SC900 Secure Desktop KVM Switches



#### Vertiv<sup>™</sup> Avocent<sup>®</sup> Cybex<sup>™</sup> SC800 / SC900 Secure Desktop KVM switches

are field-proven, secure, KVM switching solutions with special support for government agencies and security conscientious organisations.

- The Cybex SC800/900 DHP DHPC, and DVI-D series secure desktop KVM switching portfolio, available in single and dual head models, eliminates redundant peripherals and reduces desktop clutter.
- Prevents information leaks, transfer or crosstalk between adjacent ports and filters ultrasonic audio frequencies via unidirectional optical data diodes (UODD).
- Active intrusion detection and tamper-evident holographic labels prevent hardware from being compromised.
- Universal Video Connectors support DP, HDMI, and DVI-D.

#### **Certifications:**

TAA compliant, BAA, Designed for NIAP / Common Criteria Protection Profile for Peripheral Sharing Device (PSD) v4.0.

Part Number	Description
SC820DPH-400	CYBEX™ SC Universal DP/H Secure KVM Switch 2-Port Single Display, PP4.0
SC920DPH-400	CYBEX™ SC Universal DP/H Secure KVM Switch 2-Port Dual Display, PP4.0
SC840DPH-400	CYBEX™ SC Universal DP/H Secure KVM Switch 4-Port Single Display, PP4.0
SC940DPH-400	CYBEX™ SC Universal DP/H Secure KVM Switch 4-Port Dual Display, PP4.0
SC845DPH-400	CYBEX™ SC Universal DP/H Secure KVM Switch 4-Port Single Display with CAC, PP4.0
SC945DPH-400	CYBEX™ SC Universal DP/H Secure KVM Switch 4-Port Dual Display with CAC, PP4.0
SC985DPH-400	CYBEX™ SC Universal DP/H Secure KVM Switch 8-Port Dual Display with CAC, PP4.0
SC840DVI-400	CYBEX™ SC DVI Secure KVM Switch 4-Port Single Display, PP4.
SC940DVI-400	CYBEX™ SC DVI Secure KVM Switch 4-Port Dual Display, PP4.0
SC840DPHC-400	CYBEX™ SC Universal DP/H + USB-C Secure KVM Switch 4-Port Single Display, PP4.0
SC940DPHC-400	CYBEX™ SC Universal DP/H + USB-C Secure KVM Switch 4-Port Dual Display, PP4.0
SC845DPHC-400	CYBEX™ SC Universal DP/H + USB-C Secure KVM Switch 4-Port Single Display, with CAC,PP4.0
SC945DPHC-400	CYBEX™ SC Universal DP/H + USB-C Secure KVM Switch 4-Port Dual Display with CAC, PP4.0



#### **Certifications:**

TAA compliant, BAA, Designed for NIAP / Common Criteria Protection Profile for Peripheral Sharing Device (PSD) v4.0.



#### **Certifications:**

Designed for Common Criteria Protection Profile for Peripheral Sharing Device (PSD) v4.0.

### Vertiv<sup>™</sup> Avocent<sup>®</sup> Cybex<sup>™</sup> SCM 100 Series Secure Desktop Matrix

#### Avocent<sup>®</sup> Cybex<sup>™</sup> SCM Secure Desktop Matrix KVM Switch

offers a proven solution for guarding against cyber intrusion at the desktop.

- Allows users to securely interact with multiple computers and observe two active computers simultaneously thus improving situational awareness. Through cursor navigation switching (CNS), users have the flexibility to manage and monitor their data by simply pressing the left CTRL key and moving their mouse across window borders.
- Dedicated peripheral port permits a secure connection to external USB devices, including CAC smart card readers, fingerprint readers, and face recognition devices.
- Universal data connectors support DP, HDMI, and DVI-D.
- Protected video display emulators eliminate potential data leakage from display to computer.
- Unidirectional Optic Data Diodes (UODD) allow data to only flow in one direction.

Part Number	Description
SCM145DPH-400	CYBEX™ SC Universal DP/H Secure Desktop Matrix 2x4 KVM with CAC, PP4.0
SCM185DPH-400	CYBEX™ SC Universal DP/H Secure Desktop Matrix 2x8 KVM with CAC, PP4.0

#### Vertiv<sup>™</sup> Avocent<sup>®</sup> Cybex<sup>™</sup> Secure MultiViewer KVM Switch

#### Avocent<sup>®</sup> Cybex<sup>™</sup> SCM Secure MultiViewer KVM Switch

continues to provide the KVM solution required in accessing both classified and non-classified data.

Simultaneously view multiple computers on a single display.

- Ability to interact with various security classifications on a single screen.
- With CNS, keyboard and mouse transitions seamlessly when moving the cursor across window borders while holding the left CTRL key.
- Universal video connectors support DP, HDMI or DVI-D.
- Smart-card (CAC) or biometric readers for authentication across multiple secure computers.
- Multi-colored button LEDs for enhanced channel identificaton.

Part Number	Description
SCMV245DPH-400	CYBEX™ SC Universal DP/H Secure 4-Port MultiViewer KVM with CAC, PP4.0
SCMV285DPH-400	CYBEX™ SC Universal DP/H Secure 8-Port MultiViewer KVM, PP4.0
SCMV2160DPH-400	CYBEX™ SC Universal DP/H Secure 16-Port MultiViewer KVM, PP4.0





### Vertiv<sup>™</sup> Avocent<sup>®</sup> Cybex<sup>™</sup> SCKM 100 Secure Desktop KM Switches

**The Avocent<sup>®</sup> Cybex<sup>™</sup> SCKM 100 Switch** provides real-time access to up to 4 systems at a time from a single keyboard and mouse.

- Cursor navigation switching lets users switch control between systems by simply moving the mouse cursor from one display monitor to another while pressing the left CTRL key.
- Unidirectional Optical Data Diodes (UODD) assure YSB peripheral isolation enabling data flow from devices to host only.

#### **Certifications:**

TAA / BAA compliant, CE, RCM, FCC class B, VCCI, TUV US, TUV Canada, Designed for NIAP / Common Criteria Protection Profile for Peripheral Sharing Device (PSD) v4.0.

Part Number	Description
SCKM140PP4-400	CYBEX™ SC Universal DP/H Secure Desktop KM , PP4.0

#### Vertiv<sup>™</sup> Avocent Cybex<sup>™</sup> Accessories

Part Number	Description
AFP0004	4-port Active Front Panel (AFP) remote KVM switch
AFP0008	8-port Active Front Panel (AFP) remote KVM switch
AFPSPLITTER	$Avocent^{\texttt{0}}$ SwitchView AFP Splitter cable for SV Matrix KVM
SCMDR0001-400	SC MDR Smart-Card Reader, 4 Ports
SCUSBHIDFILTER	SC USB HID Filter with eLock
USBCUSBCNP	3M (10FT) USB-C/USB-C +ETH +PWR Adapter Cable



Vertiv<sup>™</sup> Cybex<sup>™</sup> AFP



#### Vertiv<sup>™</sup> Avocent<sup>®</sup> SV200 and SV300 Desktop KVM Switches

#### Avocent® Desktop KVM Switches simplify access to essential business systems.

- Universal video connectors support DVI-D, HDMI, DisplayPort, and support for resolutions up to UHD 4K assures images quality is highly accurate and video plays at the highest definition possible.
- Managed copy and paste allows content to be copied from one system to another.
- Independent audio and USB switching lets users freeze audio and USB 3.0 peripherals while simultaneously working on a different system.
- Multiple USB ports provide easy connectivity to external USB devices, quick data transfer and high-speed charging of mobile devices.

Part Number	Description
SV240DPH-400	Avocent® SV Universal DP/H KVM Switch 4-Port Single Display
SV2160DPH-400	Avocent® SV Universal DP/H KVM Switch 16-Port Single Display
SV340DPH-400	Avocent® SV Universal DP/H KVM Switch 4-Port Dual Display



#### Vertiv<sup>™</sup> Avocent<sup>®</sup> SV KVM Matrix

Allows for monitoring and managing of two active computers through a single KVM.

- Universal video connections support HDMI, DisplayPort and DVI-D to support for resolutions up to UHD 4K assures image quality is highly accurate and video plays at the highest definition possible.
- Allows users to interact with multiple computers and enhances situational awareness to multi-task by keeping two critical systems in the user's field of vision.

Through Cursor Navigation Switching (CNS), users have increased productivity through the ease of moving the cursor across screen borders.





Part Number	Description
SVM140DPH-400	Avocent® SV Universal DP/H Desktop Matrix 2x4 KVM
SVM180DPH-400	Avocent® SV Universal DP/H Desktop Matrix 2x8 KVM

#### Vertiv<sup>™</sup> Avocent SV MultiViewer KVM

Allows for monitoring and seamless interaction with up to 16 computers up to two displays while using a single KVM.

- Universal video connections support HDMI, DisplayPort, and DVI-D to support for resolutions up to UHD 4K assures image quality is highly accurate and video plays at the highest definition possible.
- Allows users to interact with up to 16 computers enhancing the ability to multi-task by viewing multiple computers on up to two displays.

Provides users with flexible display layout view options across multiple screens.



Part Number	Description
SVMV240DPH-400	Avocent® SV Universal DP/H 4-Port MultiViewer KVM
SVMV280DPH-400	Avocent® SV Universal DP/H 8-Port MultiViewer KVM







#### Vertiv<sup>™</sup> Avocent<sup>®</sup> LongView<sup>™</sup> 5500 and 5520

#### LongView<sup>™</sup> 5500:

- Provides 'at the PC' real-time access with UHD clarity and immediate USB responsiveness from a remote location
- DisplayPort 1.2 connectivity, Single head 4K 60 extension assures image quality is highly accurate and video plays at the highest definition possible
- Local console output duplicates incoming video and audio

#### LongView<sup>™</sup> 5520:

- Provides 'at the PC' real-time dual-head access with UHD clarity and immediate **USB** responsiveness
- DisplayPort 1.2 connectivity, Dual head 4K 60 extension assures image quality is highly accurate and video plays at the highest definition possible
- Hi-speed USB for isochronous devices

Part Number	Description
LV5500R-400	LongView Single-head DP Extender, 4K60 video, Local Pass Through, USB2.0, audio, CATx or fiber (Transmitter)
LV5500T-400	LongView Single-head DP Extender, 4K60 video, Local Pass Through, USB2.0, audio, CATx or fiber (Receiver)
LV5520R-400	LongView Dual-head DP Extender, 4K60 video, USB2.0, audio, CATx or fiber (Transmitter)
LV5520T-400	LongView Dual-head DP Extender, 4K60 video, USB2.0, audio, CATx or fiber (Receiver)





#### Vertiv<sup>™</sup> Avocent<sup>®</sup> LongView<sup>™</sup> 5000 Series Extenders

The Avocent<sup>®</sup> LongView<sup>™</sup> 5000 Series Extenders of high performance extender solutions provide an at the desktop experience in environments where conditions make it is advantageous to operate and manage critical business systems from a secure, monitored location.

- Users can access systems and applications remotely without sacrificing video quality, audio quality or device capability.
- High-definition Display Port Video Supports DisplayPort Dual Mode (DP++) and can transmit maximum resolution of up to 3840x2160 (UHD 4K) with a single monitor, or two 1920 x 1200 (WUXGA) video streams in a dual monitor configuration.
- USB 2.0 enables connection of up to six USB human interface devices including mice, keyboards, graphics tablets, touchscreens, jog shuttles, joysticks, 3D explorers, mass storage devices and isochronous devices like webcams and headsets.
- HD-quality high definition analog stereo audio input and output. S/PDIF input also supported.
- Plug and play the LV5000 Series extenders are delivered in a zero config state so you can plug them in and start working right away. There's no need for drivers or software to be installed.

Part Number	Description
LV5020P-201	LongView dual DP,USB,audio,CATx 150M
LV5020P-202	LongView dual DP,USB,audio,CATx 150M

When ordering products please replace the suffix "-xxx" with the suffix for your region, as follows: -201 UK and Ireland





#### Vertiv<sup>™</sup> Avocent<sup>®</sup> LongView<sup>™</sup> 4000 KVM Extenders

**The Avocent**<sup>®</sup> **LongView**<sup>™</sup> **4000 KVM extenders** enable you to locate your critical computing hardware in a secure and temperature controlled environment, while maintaining the same user experience.

- Video, USB 2.0 (Low and Full speed) and audio all pass along a single cable, providing up to 50m (150ft) of extension.
- The transmitter is powered via its USB port to reduce the need for external power supplies
- Supports DVI-D (HDMI with adapter) video on single or dual screens, with resolutions up to 1920 x 1200 @ 60Hz.
- The LongView 4000 series extenders are delivered in a zero config state so you can plug them in and start working with them straight away. There's no need for drivers or software.
- USB 2.0 support of any USB human interface device from mice and keyboards through to graphics tablets, touchscreens, jog shuttles, joysticks, 3D explorers and mass storage devices. Full speed (12Mbps) isochronous devices such as headsets are supported.

Part Number	Description
LV4010P-201	LongView single DVI,USB,audio,CATx 50M
LV4010P-202	LongView single DVI,USB,audio,CATx 50M
LV4020P-201	LongView dual DVI,USB,audio,CATx 50M
LV4020P-202	LongView dual DVI,USB,audio,CATx 50M

When ordering products please replace the suffix "-xxx" with the suffix for your region, as follows: -201 UK and Ireland

-202 European region



#### Vertiv<sup>™</sup> Avocent<sup>®</sup> LongView<sup>™</sup> 3000 KVM Extenders

**The Avocent<sup>®</sup> LongView<sup>™</sup> 3000 KVM extenders** let you place a keyboard, monitor, mouse, speakers and microphone up to 1,000 feet away from a computer or Vertiv<sup>™</sup> Avocent<sup>®</sup> KVM switch.

- VGA resolutions of 1920 x 1200 are achievable at up to 300 meters (1000ft).
- The LongView 3000 series extenders are delivered in a zero configuration state so you can plug them in and start working immediately. There's no need for additional drivers or software.
- USB 2.0 (Low and Full speed) support allows all USB compatible accessories (including isochronous devices) to be extended connected to its 4 port hub.

Part Number	Description
LV3010P-201	LongView single VGA,USB,audio,CATx 300M
LV3010P-202	LongView single VGA,USB,audio,CATx 300M
LV3020P-201	LongView dual VGA,USB,audio,CATx 300M
LV3020P-202	LongView dual VGA,USB,audio,CATx 300M

When ordering products please replace the suffix "-xxx" with the suffix for your region, as follows: -201 UK and Ireland

-202 European region



#### Server Room IT Management Solutions Vertiv<sup>™</sup> Avocent<sup>®</sup> "at-the-rack" access Solutions



# When managing a server room, individually accessing each rack and device can waste a lot of time.

Vertiv offers you the solution which allows you to manage these devices from one central point. With the Vertiv<sup>™</sup> Avocent<sup>®</sup> Rack Solutions you can access and control the server room without the need to physically be there. Not only do the rack solutions allow you to be in another room as the servers, but they also allow you to manage the servers from another building, country or continent as long as you have an Internet connection, through our digital IP range.

# To sum up, by investing in the Vertiv<sup>™</sup> Avocent<sup>®</sup> Rack Solutions, you benefit from:

- More TIME connect to any device in the server room, wherever you are, and stop
  wasting the time that takes for you to actually be there
- Proximity an Internet connection can bring you closer to your server room, anywhere you are on the globe
- Less Costs by accessing the servers faster, you can decrease the down time, thus allowing your business to save more money
- Simplify work with ability to copy and paste data

Part Number	Description
AV3108-xxx	8 port AutoView KVM with 1 local and 1 remote users, VM and CAC
AV3216-xxx	16 port AutoView KVM with 2 local and 1 remote users, VM and CAC
DSAVIQ-PS2M	Virtual Media server interface module for VGA video, PS/2 keyboard and mouse, and USB 2.0 virtual media w/ 14 in
USBIAC2-7	7 ft USB Integrated Access cable 2nd Gen.
USBIAC2-10	10 ft USB Integrated Access cable 2nd Gen.
MPUIQ-VMCHD	Server Interface Module for HDMI video, USB keyboard/mouse supporting virtual media, CAC and USB2.0.
MPUIQ-VMCHS	HIGH-RES/VM/CAC/USB2HS IQ MODULE
MPUIQ-VMCDV	Server Interface Module for DVI video, USB keyboard/mouse supporting virtual media, CAC and USB2.0
MPUIQ-VMCDP	Server Interface Module for DisplayPort video, USB keyboard/mouse supporting virtual media, CAC and USB2.0.
SFIQ-VGA	Small Form Factor, Server Interface Module for VGA, USB keyboard, mouse. Supports virtual media, CAC and USB 2.0. Used with all MPU, AV3108 and AV3216 appliances.
SFIQ-VGA08	Small Form Factor, Server Interface Module for VGA, USB keyboard, mouse. Supports virtual media, CAC and USB 2.0. Used with all MPU, AV3108 and AV3216 appliances. (8 pack)

When ordering products please replace the suffix "-xxx" with the suffix for your region, as follows:

-201 UK and Ireland

-202 European region

Server Room IT Management Solutions LCD Trays



### Even though managing your infrastructure remotely gives you many benefits, there will be times when you will need to physically be there to add more hardware, memory, etc.

In order to do that, you need local access devices that get the job done efficiently. So, forget the crash carts, the long cable wires and wasting time by connecting/ disconnecting the peripherals! Vertiv introduces you the built-in Vertiv<sup>™</sup> Avocent<sup>®</sup> LCD tray, which allows you to save space and give you efficient access to the rack.

Our products are developed smart, therefore offering you a better solution to managing your IT infrastructure.

# The Vertiv<sup>™</sup> Avocent<sup>®</sup> LCD Trays are no different, hence offering you the following benefits:

- More Space being compact, our LCD trays consume a minimal amount of rack space
- Simplicity the product is easy to mount and connect
- Efficiency a better working environment equals more productivity
- Durability our LCD trays are made to last!

The compact design is well-suited for the small to midsize business environment, data centre and server rooms. Vertiv Avocent LCD consoles are available as a standalone or with an 8- or 16-port KVM switch in the same 1U space.

Part Number	Description
LRA185KMM-xxx	1U 19" LCD console w/ USB touchpad and keyboard
LRA185KMM8-xxx	1U 19" LCD console w/ USB touchpad, keyboard and pre-mounted 8-ports AutoView 3108 switch
LRA185KMM16-xxx	1U 19" LCD console w/ USB touchpad, keyboard and pre-mounted 16-ports AutoView 3216 switch

When ordering products please replace the suffix "-xxx" with the suffix country Keyboard



## **SECTION 2**

# **Enterprise IT Infrastructure Solutions for Data Centre**

If you want to increase your profit, reduce your IT costs and streamline your data centre management, you are certainly looking for:

### 1. Remote Management

Remotely and securely access and manage data centre IT assets.

### 2. Centralisation

Centralise and standardise IT remote management.

#### 3. Capacity Management and Planning

Get visibility into current data centre capacity and the ability to accurately forecast needs.

#### 4. Power Management

Optimise your customers' data centre power requirements and ensure maximum availability of their infrastructure.

#### Enterprise IT Infrastructure Solutions for Data Centre Remote Management





# With our technology, you can remotely manage any device, any location, any vendor, any time, securely.

This applies to servers and other IT and network devices (routers, switches, firewalls, etc). Administrators can control every connected device from anywhere they like, as if they were actually on site – even when the device itself can no longer communicate over the network. As a result, the response time and outage duration are shortened, thereby improving IT management efficiency and IT availability.

#### **Serial Consoles**

The Avocent® ACS serial consoles, part of Avocent's renowned enterprise class data centre products, offer in-band and out-of-band serial access to remotely manage IT devices anywhere in the world. With the new cellular feature, providing additional connectivity capabilities, the ACS8000 cellular builds on its robust feature set to address emergency situations such as accessing locked-up devices and loss of IP band connectivity.

#### Vertiv<sup>™</sup> Avocent<sup>®</sup> ACS 8000

Deliver secure in-band and out-of-band visibility and control to downstream equipment in enterprise data centres, as well as cloud and colocation facilities. Now with cellular capabilities, the Vertiv<sup>™</sup> Avocent<sup>®</sup> ACS8000 Cellular provides flexibility to access devices when wired networks are down (failover) or not available at the device location.

#### Vertiv<sup>™</sup> Avocent<sup>®</sup> ACS 800

The Avocent<sup>®</sup> ACS 800 serial console provides serial access, environmental monitoring, IoT integration and remote networking capability to the Edge oriented market sectors of financial institutions, retail chains, education and others.

Part Number	Description
ACS804MEAC-404	4-Port ACS800 Serial Console with analog modem, external AC/DC Power Brick - Jumper cord: Plug C14 to connector C13
ACS8008SAC-404	8-Port ACS8000 Console System with single AC Power Supply
ACS8008SDC-400	8-Port ACS8000 Console System with single DC Power Supply
ACS8008MDAC-404	8-Port ACS8000 Console System with dual AC Power Supply and Analog Modem
ACS8008-EU-DAC-400	8 Port ACS8000 cellular with 4G/LTE dual AC Power Supply
ACS8016SAC-404	16-Port ACS8000 Console System with single AC Power Supply
ACS8016DAC-404	16-Port ACS8000 Console System with dual AC Power Supply
ACS8016MDAC-404	16-Port ACS8000 Console System with dual AC Power Supply and Analog Modem
ACS8016-EU-DAC-400	16 Port ACS8000 cellular with 4G/LTE dual AC AC Power Supply
ACS8032SAC-404	32-Port ACS8000 Console System with single AC Power Supply
ACS8032MDAC-404	32-Port ACS8000 Console System with dual AC Power Supply
ACS8032MDDC-400	32-Port ACS8000 Console System with dual AC Power Supply and Analog Modem
ACS8032-EU-DAC-400	32 Port ACS8000 cellular with 4G/LTE dual AC AC Power Supply
ACS8048SAC-404	48-Port ACS8000 Console System with single AC Power Supply
ACS8048DAC-404	48-Port ACS8000 Console System with dual AC Power Supply
ACS8048MDAC-404	48-Port ACS8000 Console System with dual AC Power Supply and Analog Modem
ACS8048MDDC-404	48-Port ACS8000 Console System with dual DC Power Supply and Analog Modem
ACS8048-EU-DAC-400	48-Port ACS8000 cellular with 4G/LTE dual AC AC Power Supply

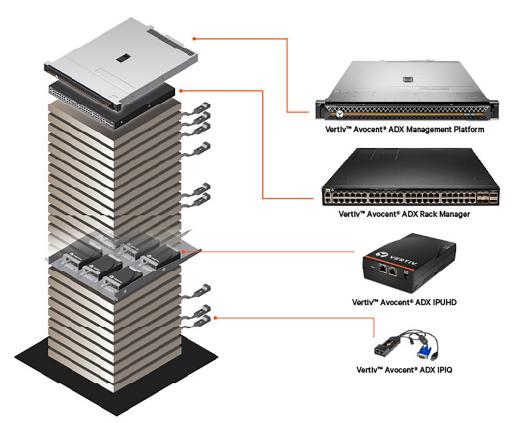


## Enterprise IT Infrastructure Solutions for Data Centre Vertiv<sup>™</sup> Avocent<sup>®</sup> ADX Ecosystem

The Vertiv<sup>™</sup> Avocent<sup>®</sup> ADX Ecosystem is built upon a secure common architecture which seamlessly integrate and scale to create an open yet resilient IT management platform – from Enterprise to Edge configurations. Avocent ADX Ecosystem provides the highest performance and agility, security, and enables automation, management, monitoring and control of all your devices like no other solution in the market.

#### **Key Benefits**

- Fastest and most feature rich KVM experience on a single device
- All digital architecture for flexible and scalable deployments
- Most expansive management of IT devices
- Resilient and secure technology supporting 100+ simultaneous users
- Common architecture with open standards, platforms and APIs



Part Number	Description
ADX-MP1000DAC-400	Vertiv ADX Management Platform.
ADX-MP1000VA	Vertiv ADX Management Platform - MP1000 Virtual Appliance
ADX-RM1048PDAC-400	Vertiv ADX Rack Manager, 48 PoE Ports.
ADX-IPUHD-400	Vertiv ADX IPUHD 4K IP KVM device.
ADX-IPIQ-400	Vertiv ADX IPIQ IP KVM device, 1920x1080, VGA native adapter.

#### Enterprise IT Infrastructure Solutions for Data Centre Vertiv<sup>™</sup> Avocent<sup>®</sup> MergePoint Unity<sup>™</sup>

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# The Vertiv<sup>™</sup> Avocent<sup>®</sup> MergePoint Unity<sup>™</sup> switch is the next generation KVM over IP switch.

This industry-leading switch provides IT administrators a complete and secure remote management solution to access and control servers, networking equipment and other devices found in data centres and branch offices.

#### **Key Benefits**

- Advanced Remote Management Provides secure and remote, out-of-band connections directly to the physical KVM, USB and serial ports to complement existing in-band software management tools
- Meet Service Level Agreements and Minimise Downtime Unified approach enables IT administrators a faster method to diagnose, reconfigure or restore equipment
- Virtual Media Enables USB media such as CD-ROMs, flash memory and external drives to be virtually attached to a remote server's USB port
- CAC/Smart Card Support Utilizing the virtual media capabilities remote or local users can map a USB-based smart card reader to the attached servers and authenticate using their smart cards
- Enhanced Serial Adapters Supports standard, remote SSH connections to the attached serial devices and includes electronic pin-out options for quick and easy connections to the console ports on Cisco network equipment
- Power Device Port Connect supported rack PDUs for integrated power control, measurement and reporting
- FIPS 140-2 Compliant Cryptography The FIPS mode of operation uses an embedded FIPS 140-2 certified OpenSSL cryptographic module (Certificate #1051)
- Includes HTML5 viewer support, no longer the need to exclusively rely on Java or ActiveX for KVM sessions

#### Part Number Description MPU108EDAC-001 8 port, 1 digital KVM path, dual AC Power Supply MPU2016DAC-001 16 port, 2 digital KVM paths, dual AC Power Supply MPU2032DAC-001 32 port, 2 digital KVM paths, Dual AC Power Supply MPU4032DAC-001 32 port, 4 digital KVM paths, dual AC Power Supply MPU8032DAC-001 32 port, 8 digital KVM paths, dual AC Power Supply MPUIQ-VMCHD Server Interface Module for HDMI video, USB keyboard/mouse supporting virtual media, CAC and USB2.0. MPUIQ-VMCHS HIGH-RES/VM/CAC/USB2HS IQ MODULE MPUIQ-VMCDV Server Interface Module for DVI video, USB keyboard/mouse supporting virtual media, CAC and USB2.0 MPUIQ-VMCDP Server Interface Module for DisplayPort video, USB keyboard/mouse supporting virtual media, CAC and USB2.0. MPUIQ-SRL MergePoint Unity switch serial IQ module Small Form Factor, Server Interface Module for VGA, USB keyboard, mouse. Supports virtual media, CAC and USB 2.0. Used with all MPU, AV3108 SFIQ-VGA and AV3216 appliances. Small Form Factor, Server Interface Module for VGA, USB keyboard, mouse. Supports virtual media, CAC and USB 2.0. Used with all MPU, AV3108 SFIQ-VGA08 and AV3216 appliances. (8 pack) CBL0181 12" USB A to Micro USB B cable CBL0182 8" USB A to Micro USB B cable CBL0183 30" USB A to Micro USB B cable UPD-IEC Power Supply, Power Cord and 4 output cable to support up to 4 AVRIQ-SRL modules





**Certifications:** 

TAA, CE, FCC approvals.



#### Vertiv<sup>™</sup> Avocent<sup>®</sup> HMX 5000/6000/8000 High Performance KVM System

**The Vertiv**<sup>TM</sup> **Avocent**<sup>®</sup> **HMX High Performance KVM System** is a digital, IP-based solution that provides a highly flexible way to connect hundreds of users to thousands of servers and workstation equipment in a secure, real-time manner.

- Ideal for control rooms with real-time control with pixel perfect digital video supporting resolutions up to 2560 x 1600at 60Hz.
- Supports redundant network operation through units that automatically detect whether the network is in operation and automatically change to a second port when a failure is detected.
- Enables connection of USB devices from mice and keyboards through to graphics tablets and joysticks alongside mass storage devices.
- Remote maintenance and out-ofhand BIOS level access with high video perfomance through Real VNC viewer.
- Easy centralized management with user rights and audit trails through the Avocent<sup>®</sup> HMX Advanced Manager.
- Small form factor transmitter available that takes up zero-U of rack space.

#### Vertiv<sup>™</sup> Avocent<sup>®</sup> HMX 6500R High Performance KVM Receiver

**The Vertiv<sup>™</sup> Avocent<sup>®</sup> HMX 6500R High Performance KVM System** receiver delivers KVM and VM access without requiring additional hardware or compromise on KVM functionality.

- Crisp and clear picture quality, audio, and USB 2.0 to single/dual screens over a single 1GbE link.
- Real-time access to unlimited physical and virtual machines for a single human-machine interface.
- Dual-head displays for physical machines or Single-head display for virtual machines (not both).
- Virtual Machines count towards endpoint license.
- Accessible anywhere on any device with ease and security.

Part Number	Description
HMXAMGR24G2-400	HMX Advanced Manager Hardware 24 node Gen 2
HMX5160T-DVID	HMXTX SNGL DVID,USB,Audio, Zero U
HMX5150T-VGA	HMXTX SNGL VGA,USB,AUDIO-0U
HMX6150T-HDMI	Vertiv Avocent HMX 6150 HDMI (Single Head) Transmitter, Zero U with USB2.0 & Audio
HMX6150T-DP	Vertiv Avocent HMX 6150 DisplayPort (Single Head) Transmitter, Zero U with USB2.0 & Audio
HMX5100T-xxx	HMX TX single DVI-D, USB, audio, SFP- transmitter
HMX5100R-xxx	HMX RX single DVI-D, USB, audio, SFP-receiver
HMX5200R-xxx	HMX RX dual DVI-D, USB, audio, SFP-receiver
HMX5200T-xxx	HMX TX dual DVI-D, USB, audio, SFP- transmitter
HMX6200T-xxx	HMX TX dual DVI-D,QSXGA,USB,audio,SFP- transmitter
HMX6210T-xxx	HMX TX dualDVI-D,QSXGA,USB,audio,SFP,VNC- transmitter
HMX6500R-400	HMX 6500 Receiver DH-DP RX, Audio, USB 2.0, Virtual Machine
HMX6200RXDP-400	HMXRX,Dual DP++,USB,Audio,SFP
HMX6200TDP-400	HMXTX,Dual DP,USB Audio,SFP
HMX8000R-400	DH 4K,audio,USB2.0, 10GB-Rx
НМХ8000Т-400	DH 4K,audio,USB2.0, 10GB-Tx

When ordering products please replace the suffix "-xxx" with the suffix for your region, as follows: -201 UK and Ireland / -202 European region Enterprise IT Infrastructure Solutions for Data Centre Vertiv<sup>™</sup> Avocent<sup>®</sup> DSView<sup>™</sup> Management software



#### Centralisation

IT administrators need to access IT devices from anywhere, carry out diagnoses and implement changes regularly. Regardless of the condition or status of the operating system or network, we offer a software solution which provides a secure, centralised management solution for all connected IT assets – the Vertiv<sup>™</sup> Avocent<sup>®</sup> DSView management software.

When used in conjunction with serial console appliances, rack PDUs, service processor gateways and KVM appliances, the hardware and software combine to allow IT administrators to remotely access, monitor and control target devices on multiple platforms at numerous locations–anywhere, anytime.

#### When using Vertiv<sup>™</sup> Avocent<sup>®</sup> DSView software you benefit from:

- Easier Administration
- A secure, browser-based user interface for central administration of the entire integrated IT
- Reliable Access
- Hub-and-spoke architecture allows for high availability and decentralised, consolidated and location-independent access
- Easy Expansion
- Easy to incorporate new technologies and provides an integration option for VMware, Citrix and Hyper-V – in addition to an API for own developments and third party tools and systems
- Higher Security
- Supports seamless integration with existing security policies, offers various authentication mechanisms and encrypts the entire data traffic

Part Number	Description
DSV4.5-Base	DSView Base License, Unlimited Spoke, Zone, Users and API
DSV4.5-100Dev	DSView 100 Device Count
DSV4.5-500Dev	DSView 500 Device Count
DSV4.5-1000Dev	DSView 1000 Device Count
1YRSLV-100Dev	DSView 1 year Silver Subscription 100 Device Count
1YRSLV-500Dev	DSView 1 year Silver Subscription 500 Device Count
1YRSLV-1000Dev	DSView 1 year Silver Subscription 1000 Device Count
1YRGLD-100Dev	DSView 1 year Gold Subscription 100 Device Count
1YRGLD-500Dev	DSView 1 year Gold Subscription 500 Device Count
1YRGLD-1000Dev	DSView 1 year Gold Subscription 1000 Device Count



#### The Importance of Service Coverage

Vertiv offers a complete range of Service Programs specifically designed for products addressing EDGE applications. The portfolio includes various options guaranteeing up to 10-year coverage to meet any possible customer need. Vertiv supports any application with an extensive service offering including installation, start-up, commissioning, maintenance, replacements, 24/7 remote monitoring and diagnostics and much more.

#### **Highlights**

#### Services for Single-Phase UPS Up To 20 kVA

#### Power Emergency (0-3 kVA UPS)

Five-year protection program to be purchased only at the point of sale, including:

- Advance replacement of faulty unit within eight working hours from incident ticket acknowledgement
- 100% coverage of electronic parts and failed batteries excluding battery misuse and/or reduced autonomy
- FREE shipping from a selection of European countries\*
- 24x7 access to professional helpline

#### Power Assurance (3 kVA > UPS $\ge$ 20 kVA)

Five-year protection program to be purchased only at the point of sale, including:

- Advance replacement of faulty unit or on-site repair intervention\*\* (at Vertiv discretion) within eight working hours from incident ticket acknowledgement
- 100% coverage of electronic parts and failed batteries excluding battery misuse and/or reduced autonomy
- FREE shipping from a selection of European countries\*
- 24x7 access to professional helpline
- One Preventive Maintenance after the 3rd year performed by a Vertiv technician\*\*
- Vertiv™ Life™ Services (Premier version)

#### **Benefits:**

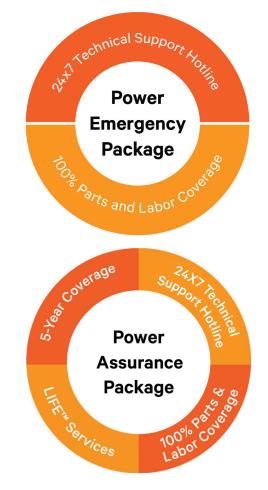
- Assured critical power delivery
- Optimised use of your IT staff
- Simplified small site UPS deployment and maintenance
- Instant access to power protection information
- Improved protection for your IT investment

#### Services For Three-Phase UPS and Thermal Management Equipment

#### Integrated Warranty Extension

One-year contract valid after the warranty period, including:

- Parts Included\*
- Labour and travel included
- On-site repair intervention within eight working hours from incident ticket acknowledgement
- One annual preventive maintenance visit
- 24x7 access to Tech. Support hotline



#### **OUR PURPOSE**

We believe there is a better way to meet the world's accelerating demand for data - one driven by passion and innovation.

#### **OUR PRESENCE**

#### GLOBAL PRESENCE

Manuf. and Assembly Locations 19 Service Centres 270+ Service Field Engineers 2,700+ Technical Support/Response 330+ Customer Experience Centres/Labs 17



Manuf. and Assembly Locations 7 Service Centres 120+ Service Field Engineers 850+ Technical Support/Response 120+ Customer Experience Centres/Labs 4

Manuf. and Assembly Locations 1 Service Centres 20+ Service Field Engineers 300+ Technical Support/Response 25+ Customer Experience Centres/Labs 2

# AND AFRICA

Manuf. and Assembly Locations 5 Service Centres 70+ Service Field Engineers 600+ Technical Support/Response 95+ Customer Experience Centres/Labs 6

Manuf. and Assembly Locations 6 Service Centres 60+ Service Field Engineers 950+ Technical Support/Response 90+ Customer Experience Centres/Labs 5

## Contact Us



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