VERTIV.

Vertiv™ VRC-S Edge-Ready Micro Data Centre System

Self-contained IT Rack Solution with integrated Power Distribution, Cooling, Monitoring and UPS up to 3.5 kW IT load



Vertiv™ VRC-S

Deploy a Comprehensive Edge Micro Data Centre Solution in Days

Vertiv VRC-S is a micro data centre solution, fully 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 separate cooling methods (split and self-contained) with back-up, and the option to integrate a UPS. Plus, an intelligent switched PDU, including monitoring of all components, and a comprehensive software package completes the offer.

You have everything you need to rapidly upgrade any space with a micro data centre to host IT edge equipment. With space to support your IT equipment and up to 3.5kW of integrated IT cooling, around a single phase 16A connection, the Vertiv VRC-S lets you quickly, easily, and confidently put IT wherever you need it.

Piecing together the various components of an IT solution, for your edge applications, can be a major challenge for today's busy IT managers. From specifying the right components, to waiting for a custom solution to be built, or integrating the appropriate cooling, UPS, PDU, and monitoring, the process consumes time and resources that you don't always have to spare.

The new Vertiv VRC-S takes the legwork and wait time out of the equation.
It offers a factory-integrated, micro data centre solution that ships in days and can be installed within hours. You get a plug-and-play IT solution that reliably and efficiently satisfies your edge IT requirements, and comes with the added peace of mind of a three-year warranty, covering every component of the system.



Vertiv™ VRC-S

At Vertiv we believe that being mindful of product design, development, use, and disposal are important to the longevity of our industry.

Checkout these environmentally conscious features of the Vertiv™ VRC-S:

- Inverter compressor matches cooling and power consumption to increase energy efficiency
- Designed to reduce onsite labor and provide remote access and management
- Limit waste related to room modifications
- Optional Energy Star certified UPS with Lithium Ion batteries

What's In The Box?

Factory integrated micro data centre with:

- Vertiv™ VR Rack-based cabinet
- Vertiv™ VRC KIT split or self-contained IT cooling unit:
  - Rack-mounted cooling unit offering 3.5kW of IT cooling capacity
  - Integrated heat rejection system of your choice
  - Condensate pump
- Vertiv™ Geist™ rPDU with sensors, switched and monitored on outlet level
- Vertiv™ Intelligence Director monitoring software
- Backup fan system connected to intelligent sensors and pre-programmed outlets
- Optional UPS Liebert® GXT5 6000VA
- Set of blanking panels: 10x 1RU

Ideally Suited For:

- IT Closets
- Open office space
- Remote locations
- Unconditioned areas
- Light industrial areas

Vertiv™ VRC-S Key Features and Benefits

Features	Benefits
A completely prefabricated micro data centre with your choice of 24 standard models.	**Planning effort is minimised** All components are guaranteed to work seamlessly to meet your requirements. The system is ready to ship in days.
Vertiv™ 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™ 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	**Increased availability through backup cooling** 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	**Reduced labour costs through monitoring optimisation** 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	**Reduction of maintenance costs** Protect your entire system for complete peace of mind.

Select Your Vertiv™ 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™ 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™ 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™ Geist™ SwitchAir™ 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

Your Benefits Form Vertiv™ VRC-S

1. "Plug and Play"

The Vertiv™ VRC-S is a "plug and play" factory assembled micro data centre, shipped within days, and deployed within hours. The project planning costs are minimised because all components are integrated and matched to each other. Power and network must be connected and, if necessary, cooling integrated into the building or the pre-filled outdoor condenser needs to be installed. Once installed, operations can begin, thus greatly reducing installation costs.

2. Highest availability

For unsurpassed reliability and maximum lifetime of your IT equipment, only the best industry-standard components have been selected for the Vertiv VRC-S. All of these components are harmonised with each other and provide the IT asset with the best conditions for uninterrupted operation. The UPS powers the cooling system and the IT assets without interruption during a utility power outage. In case of cooling system loss, integrated back-up ventilation enables operation without interruption.

3. Low operational cost

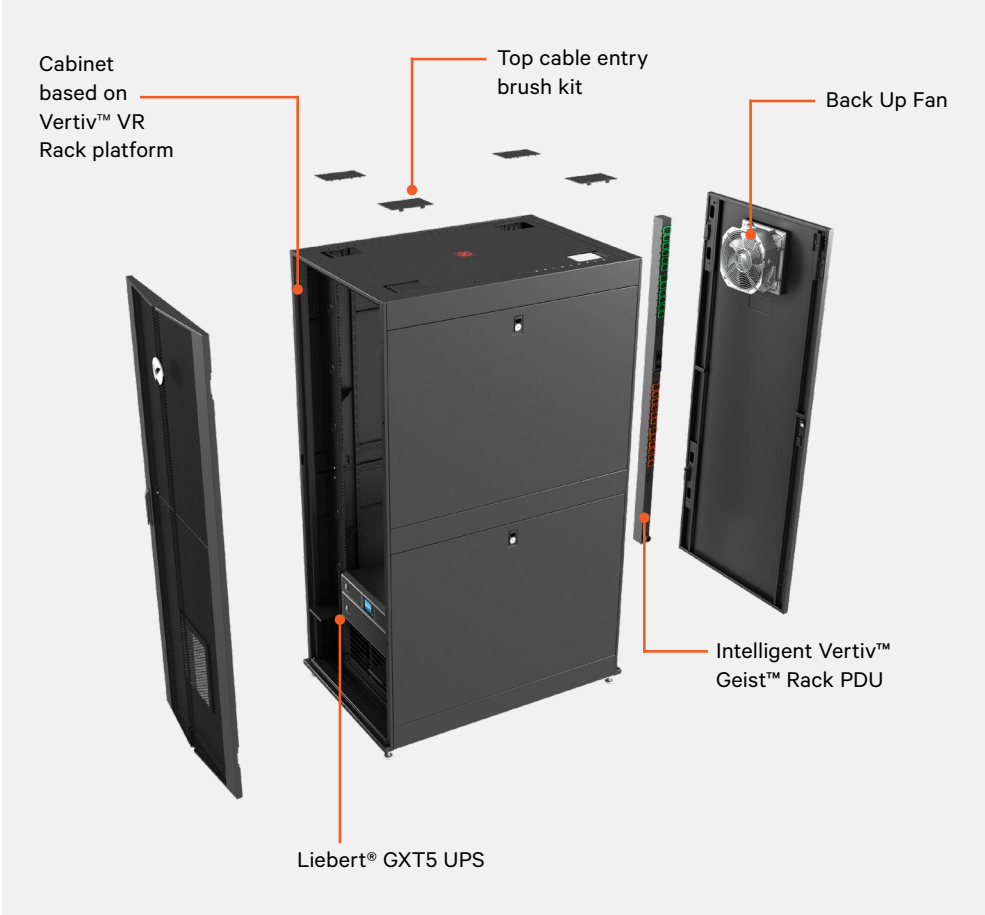
Vertiv VRC-S is designed to have the lowest possible operating costs. By using speed-controlled fans and a compressor, the Vertiv™ VRC cooling unit adapts the cooling to the actual IT heat dissipation and thus consumes only as much energy as necessary. The Energy Star 2.0 certified UPS uses the highest possible power factor, depending on the mode, reducing electricity costs.

4. Remote monitoring and control

Reliable and well-designed remote monitoring and control are crucial for the operation of edge applications in remote locations without IT staff on site. The Vertiv™ Intelligence Director provides access to all Vertiv VRC-S networked components, Vertiv VRC cooling, UPS, and PDU under one IP address and supports all common network protocols. The PDU can be switched and monitored per output, making it easy to control the application remotely. It is possible to integrate the Vertiv VRC-S application with Vertiv™ Environet™ Alert software into a data centre infrastructure management system (DCIM).

5. 3-year warranty across the entire Vertiv VRC-S system

Get an extension of factory warranty coverage beyond the original factory warranty term registering your product at Vertiv Website https://www.vertiv.com/en-emea/support/register-your-product/registration/. The product registration extends factory warranty to a total of 3 years on the entire VRC-S system. With this 3-year warranty on the entire system, Vertiv gives its promise of quality. Protect your entire system for complete peace of mind.



Vertiv™ VRC-S Services:
Complete Range of Service Programs Including On-Site Services Support/Maintenance Programs

White Glove On-site Services: Get your system off to the best possible start

Factory-trained Vertiv Services technicians can provide professional installation and startup of your Vertiv™ VRC-S. This simplifies the process and eliminates any concerns you may have about correctly, safely, and efficiently installing your equipment, which can be especially valuable for multisystem installations and multi-site rollouts. Vertiv factory-trained technicians perform the complete startup checklist and ensure your rack cooling unit is operating flawlessly from the get-go. As experts in the Vertiv VRC-S and all of its components, no one knows the equipment and installation process more intimately than Vertiv Services. You can trust your knowledgeable installation team to get the job done right, on time, and to answer any questions you and your on-site personnel may have. This ensures you're prepared to fully enjoy the many benefits of your new micro data centre system out of the box. At Vertiv Services, we stand by our equipment and strive to leave you completely satisfied with your purchase and installation process.

On-site Service Programs include:

- Coordinating the install and any prerequisites directly with you to streamline the installation process
- Reviewing all work to be performed and all safety requirements with your onsite team
- Uncrating and unpackaging all components and safely moving them to the designated location
- Levelling and labelling the network cabinet
- Mounting and securing the rack cooling unit
- Installing the heat rejection duct including connections to the Vertiv™ VRC and ceiling grid
- Installing the condensate pump
- Running the drain line under construction to an existing drain
- Plugging in the PDUs
- Extending, connecting, and grooming power and network cables
- Preforming status check of all alarm circuits
- Completing system startup
- Providing debris clean up and removal to customer-provided receptacle

Support/Maintenance Programs: Optimise Performance, Extend the Life of Your Micro Data Centre and Provide 24/7 Remote Support.

Maintenance and Support programs include a 24x7 professional helpline and grant response within an agreed time frame, providing either the component replacement or the on-site intervention of a Vertiv technician.

Technical Data

Site Requirements:

- Drain within 6m of location to accommodate the included condensate pump
- Floor must support a minimum of 1500kg
- 900mm of clearance in front and rear of rack
- Utility power: 230 VAC, 1 phase, 50 Hz, 32 A
- Wall-mounted receptacle: IEC60309 2P+E, 250 V splashproof IP44
- For Vertiv™ VRC split: Installation of the refrigerant pipes between the 19" rack mounted indoor unit and the outdoor unit

Vertiv™ VRC-S Edge-Ready Micro Data Centre System

Vertiv™ VRC-S part number:	VRCS3350-230VU	VRCS3350-230V	VRCS3350-230VSU	VRCS3350-230VS	VRCS3350-230VSLU	VRCS3350-230VSL
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)					
Cooling Unit	Vertiv™ VRC self-contained		Vertiv™ VRC Split (-15°C minimum ambient temp.)		Vertiv™ VRC Split (-34°C minimum ambient temp.)	
Model Number	VRC102KIT		VRC202KIT-N		VRC202KIT-L	
Cooling Capacity*	3,5kW		3,8kW		3,4kW	
Average sound pressure**	57,8 dB (A) @ 1 m		52,0 dB (A) @ 1 m			
UPS	Liebert® GXT5 6kVA	No	Liebert® GXT5 6kVA	No	Liebert® GXT5 6kVA	No
UPS Model Number	GXT5-6000IRT5UXLE		GXT5-6000IRT5UXLE		GXT5-6000IRT5UXLE	
PDU Model Number	GU30017L*****	GU30017L	GU30017L*****	GU30017L	GU30017L*****	GU30017L
Communication protocols	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; IEC60309 2P+E, 32 A, 250 V Splashproof IP44; 2,5 m cable (outlet at the bottom)					
Cooling Unit	Vertiv™ VRC self-contained		Vertiv™ VRC Split (-15°C minimum ambient temp.)		Vertiv™ VRC Split (-34°C minimum ambient temp.)	
Model Number	VRC102KIT		VRC202KIT-N		VRC202KIT-L	
Cooling Capacity*	3,5kW		3,8kW		3,4kW	
Average sound pressure**	57,8 dB (A) @ 1 m		52,0 dB (A) @ 1 m			
UPS	Liebert® GXT5 6kVA	No	Liebert® GXT5 6kVA	No	Liebert® GXT5 6kVA	No
UPS Model Number	GXT5-6000IRT5UXLE		GXT5-6000IRT5UXLE		GXT5-6000IRT5UXLE	
PDU Model Number	GU30017L*****	GU30017L	GU30017L*****	GU30017L	GU30017L*****	GU30017L
Communication protocols	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:	VRCS3307-230VU	VRCS3307-230V	VRCS3307-230VSU	VRCS3307-230VS	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	230 V / 1Ph / 50 Hz; IEC60309 2P+E, 32 A, 250 V Splashproof IP44; 2,5 m cable (outlet at the bottom)					
Cooling Unit	Vertiv™ VRC self-contained		Vertiv™ VRC Split (-15°C minimum ambient temp.)		Vertiv™ VRC Split (-34°C minimum ambient temp.)	
Model Number	VRC102KIT		VRC202KIT-N		VRC202KIT-L	
Cooling Capacity*	3,5kW		3,8kW		3,4kW	
Average sound pressure**	57,8 dB (A) @ 1 m		52,0 dB (A) @ 1 m			
UPS	Liebert® GXT5 6kVA	No	Liebert® GXT5 6kVA	No	Liebert® GXT5 6kVA	No
UPS Model Number	GXT5-6000IRT5UXLE		GXT5-6000IRT5UXLE		GXT5-6000IRT5UXLE	
PDU Model Number	GU30017L*****	GU30017L	GU30017L*****	GU30017L	GU30017L*****	GU30017L
Communication protocols	DHCP, HTTP, HTTPS, IPv4, IPv6, LDAP, NTP, RADIUS, RSTP, SSH, SMTP, SNMP (v1/v2c/v3), Syslog, TACACS+					
Certificated	CE, RoHS, REACH					

Vertiv™ VRC-Spart number:	VRCS3357-230VU	VRCS3357-230V	VRCS3357-230VSU	VRCS3357-230VS	VRCS3357-230VSLU	VRCS3357-230VSL
Cabinet size	Height 2265 mm, Width 800 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]	410	399	359	288	359	288
Shipping weight [kg]	510	439	495	424	510	439
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)					
Cooling Unit	Vertiv™ VRC self-contained		Vertiv™ VRC Split (-15°C minimum ambient temp.)		Vertiv™ VRC Split (-34°C minimum ambient temp.)	
Model Number	VRC102KIT		VRC202KIT-N		VRC202KIT-L	
Cooling Capacity*	3,5kW		3,8kW		3,4kW	
Average sound pressure**	57,8 dB (A) @ 1 m		52,0 dB (A) @ 1 m			
UPS	Liebert® GXT5 6kVA	No	Liebert® GXT5 6kVA	No	Liebert® GXT5 6kVA	No
UPS Model Number	GXT5-6000IRT5UXLE		GXT5-6000IRT5UXLE		GXT5-6000IRT5UXLE	
PDU Model Number	GU30017L*****	GU30017L	GU30017L*****	GU30017L	GU30017L*****	GU30017L
Communication protocols	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
Type	Online double conversion
Rating	6000 VA (IT load according max. cooling capacity)
Occupied U space	5 U
Operating frequency	50 or 60 Hz (factory-default is 50 Hz)
User-configurable AC voltage	200/208/220/230/240 VAC (Factory-default is 230 VAC)
AC-AC Efficiency	94%
Waveform	Sine wave
Battery	16 x 12 V x 9,0 Ah
Output receptacles	(6) IEC 60320 C13, (2) IEC 60320 C19 ****

PDU	Integrated rPDU GU30017L
Type	Switched and monitored on outlet level
Input	200 - 240 VAC / 32 A / 1Ph / 50 Hz
Position	Vertical
Receptacles	(20) Locking IEC 60320 C13, (4) Locking IEC 60320 C19 ****
Communication	Embedded Vertive Intelligence Director
Input Monitoring	Phase (A) Monitoring (kWh, W, VA, PF, V, A)
Outlet Monitoring	Each outlet (kWh, W, VA, PF, V, A)
Power Management	Individual outlet switching, timing, delay, sequence
Over Current 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



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