



## Vertiv™ EDGE UPS

500 - 3000 VA 230 V

Superior Power Protection  
for Edge Applications



## *The Vertiv™ EDGE UPS: Best-in-class battery backup and power protection for server, networking and EDGE applications.*

Vertiv™ EDGE is a family of highly reliable, efficient, manageable and flexible line interactive sinewave UPSs, with models ranging from 500VA to 3000VA in mini-tower, rack/tower and rack-mount form factors. With a 0.9 power factor, controllable outlets and extended runtime options, Vertiv EDGE is the right choice for protecting server and networking equipment in distributed and EDGE IT applications. Available in 1U and 2U options as well as a short-depth 3U 3000VA model, it can provide optimum runtime at the right size and power density in a cost effective UPS solution.

### **Mini Tower (750 VA, 1000 VA, 1500 VA)**



- Compact Mini Tower design for tower servers and/or applications with no available rack
- Plug and play solution requiring no installation
- Vertiv™ Intellislot SNMP/Webcards available for remote power management and OS's shutdown

### **1U Rack Mount (500 VA, 1000 VA, 1500 VA)**



- Compact 1U Rack Mount design for EDGE applications with limited rack space
- Comes with rack mounting hardware included
- Vertiv Intellislot SNMP/Webcards available for remote power management and OS's shutdown

### **2U – 3U Rack / Tower (1500 VA, 2200 VA 3000 VA 2U, 3000 VA 3Us)**



- Convertible rack/tower design with LCD display provides flexible installation options
- Extended runtime capability with external battery cabinets with autodetection, for hours of back-up time
- 3000VA 3Us height with short depth (<500 mm) for compact racks that still require maximum power protection
- Vertiv Intellislot SNMP/Webcards available for remote power management and OS's shutdown

## **At a Glance**

### **Vertiv EDGE**

- Reliable and powerful: 0.9 output power factor, ensuring more active power to protect larger loads
- Up to 6 auto-discoverable extended run battery cabinets for longer runtime
- Highly efficient: up to 98% in normal operation mode, providing energy and cost savings
- Up to 10 power outlets, with 3 controllable in a group for optimum battery usage
- Color graphic LCD display
- Advanced AVR design for a more stable output voltage regulation
- Standard 2-year warranty for both electronics and batteries

## Vertiv™ EDGE Highlights



**LCD display**  
Color and graphic LCD display for an intuitive user interface



**High output power factor (0.9)**  
It enables EDGE UPS to protect more loads and save space



**External battery cabinets**  
The Rack/Tower models allow longer runtimes thanks to the battery cabinets with auto-detection



**Efficiency up to 98%**  
High efficiency in normal operation mode means an optimized energy management, thus providing energy savings



**Flexibility**  
Easy to install and a wide range of power ratings, from 500VA up to 3000VA, available in multiple form factors: mini-tower, 1U rack and rack/tower



**Leading technology**  
Advanced AVR design (2 x boost / 1 buck taps) for a more stable output voltage regulation



**Controllable outlets**  
The group of controllable outlets allows a power control of the load, helping to achieve longer runtime

## Reliable UPS Protection At The All-Important Network Edge

The network edge is becoming increasingly important as companies seek to take advantage of Internet of Things, cloud computing and other applications that require localized compute power, networking services and data storage – all with low latency. Distributed and edge data centers are now no less important to business success than large centralized data centers, so must be afforded similar power protection.

The Vertiv™ EDGE line interactive UPS family is intended for distributed IT and edge applications that require reliable, efficient power protection for server and networking equipment. It comes in mini-tower, rack tower and rack-mount form factors, with capacities ranging from 500VA to 3000VA. Each model has a 0.9 output power factor (PF), enabling them to protect larger loads than competing models of the same capacity.

Vertiv EDGE UPSs support up to 6 extended-run battery cabinets (EBCs), providing more runtime at full load than comparable competing UPSs. Auto-detect features make the EBCs easy to add and configure.

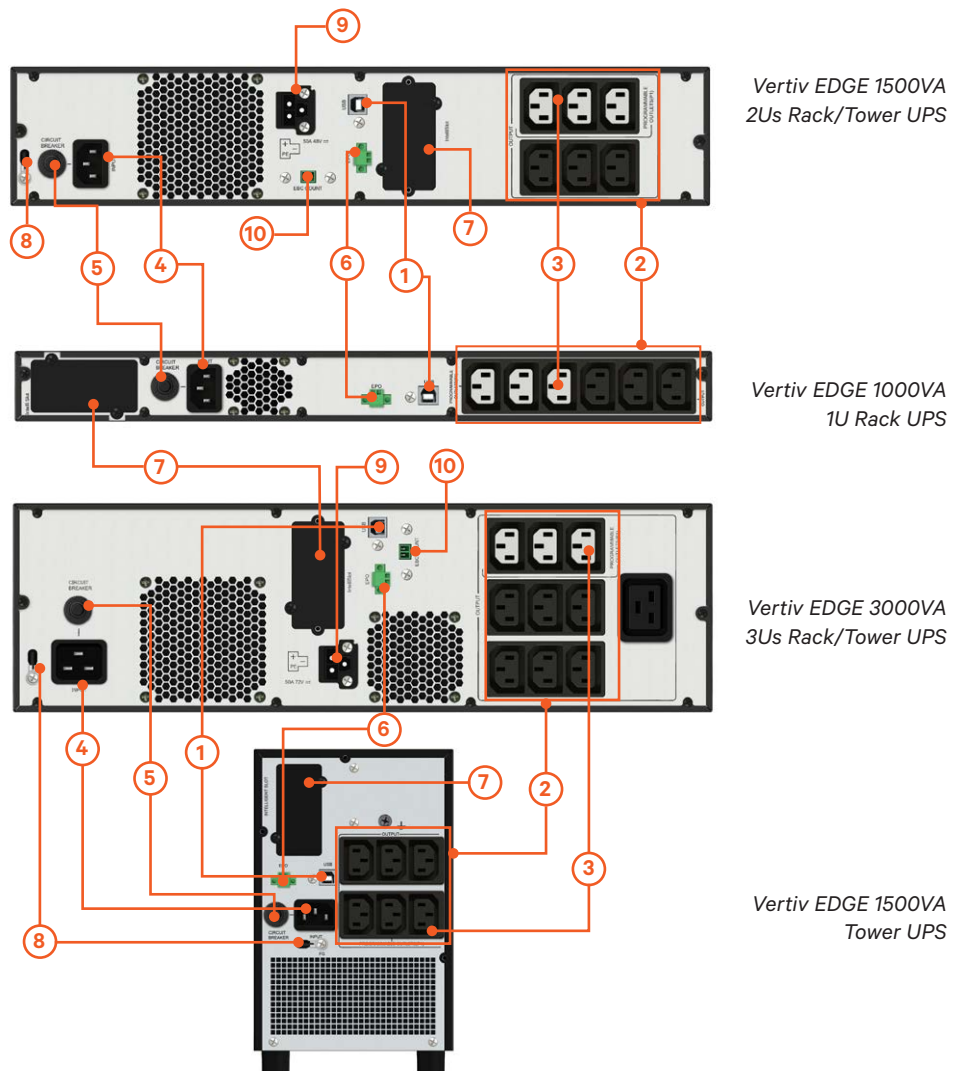
Vertiv EDGE UPSs are also highly manageable, with a colorful, graphical LCD screen for easy, intuitive on-site management, as well as optional SNMP support. Vertiv EDGE is compatible with the free Vertiv Power Assist software for local UPS status and shutdown of IT loads connected locally.

A standard 2-year warranty for both electronics and batteries protects your UPS investment.

## What's in the box

- UPS Unit
- USB Cable
- Printed Quick Installation and Guide Safety instructions
- Adjustable 4-post rack mounting kit (not included with Mini Tower)
- Support base for tower configuration (Rack/Tower Models Only)
- Power Assist software (free download from Vertiv.com)
- Input and output power cables (depending on rating and model type)

1. USB Port
2. Output receptacles
3. Programmable output group
4. Input power socket
5. Input circuit breaker
6. Emergency Power Off (EPO) connector
7. Intellislot® Port for optional cards
8. Earth terminal
9. Extended runtime battery connection
10. Automatic battery detection terminal



## Efficient & Green



**High efficiency:** Vertiv™ EDGE UPSs operate at up to 98% efficiency in normal operation mode, saving on electricity costs throughout their lifetime.

**Extended battery life:** Deep discharge protection prevents the potential damage that can occur when a UPS battery fully drains.

**Configurable “Green function”:** When in battery mode with only very small loads, the UPS will automatically shut itself down to protect batteries.

**Programmable outlets:** 3 of the 6 Vertiv EDGE outlets are configurable (1 group), enabling users to shut down less-critical loads in the event of an outage to optimize battery runtime.

**RoHS and REACH compliant:** Ensures against the use of hazardous substances in UPSs.

## Maximize Power Protection



**High output PF:** Each Vertiv EDGE UPS operates at 0.9 output power factor (PF), which means that more active power can be used to protect IT equipment. That enables Vertiv EDGE UPSs to protect larger loads compared to competing models of the same capacity with a lower PF.

**Advanced AVR design:** Automatic voltage regulation smooths out power spikes, swells and brownouts without the UPS switching to battery mode and help to extend battery life. The advanced design with 2 x boost / 1 x buck increases or decreases voltages as required to prevent the load from extreme supply voltages.

**High temperature operation:** Vertiv EDGE UPSs can operate at up to 40°C at full power, and higher ambient temperature with derating applied.

## Flexibility and Manageability



**Easy to install, configure and operate:** Auto-detect external battery modules and color LCD display help to make the UPS operation easier and the user interface more intuitive.

**Optional SNMP/web card:** For advanced remote monitoring of status and OS's shutdown.

**Environmental monitoring:** Optional web card also supports integration with environmental sensors, to detect excessive heat, moisture, motion and more.

**External battery cabinets:** Attach up to 6 external battery modules to gain additional runtime.

**Remote Emergency Power Off:** Allows the UPS to be remotely shut down during an emergency.

**Optional Liebert MicroPOD Output Distribution and Maintenance Bypass Module:** When your computer system can't be without power, even for scheduled UPS maintenance, the Liebert® MicroPOD ensures continuous uptime.

## Vertiv™ EDGE UPS Accessories

### Vertiv™ VR Racks and Enclosures:

Internal, welded frame with repetitive hold pattern delivers high load bearing capacity and additional mounting locations.

### Vertiv™ Geist™ PDUs:

Effectively distribute UPS power throughout a rack environment while organizing power cords. Rack-, wall- or floor-mounted PDUs support a selection of NEMA, IEC and hardwired inputs. Rack PDUs can be preinstalled in the VR Rack.



### Rails and mounting hardware:

4-post rail kit and hardware to mount in a rack.



### External Battery Modules:

Enable additional runtime to weather extended power outage situations. Modules are simple to install and auto-discoverable.



### Liebert® MicroPOD Maintenance Bypass:

A 2U rack-mounted installation, available in several receptacle combinations, allows manual transfer of connected equipment to utility power ensuring network availability and business continuity during scheduled service or UPS replacement.



### Optional Connectivity Cards:

Web and SNMP cards allow you to connect your Vertiv™ EDGE UPS to an Ethernet network and the Internet, to monitor and manage UPSs from a standard Web browser and, when needed, remotely provide graceful shutdown for multiple computer systems.



## Power Emergency: Comprehensive Service Support for Critical Systems

Providing more than the standard warranty and extension program, this five-year protection program is valid for single-phase UPS units 3 kVA or smaller. Purchased only at the point of sale, the program includes:

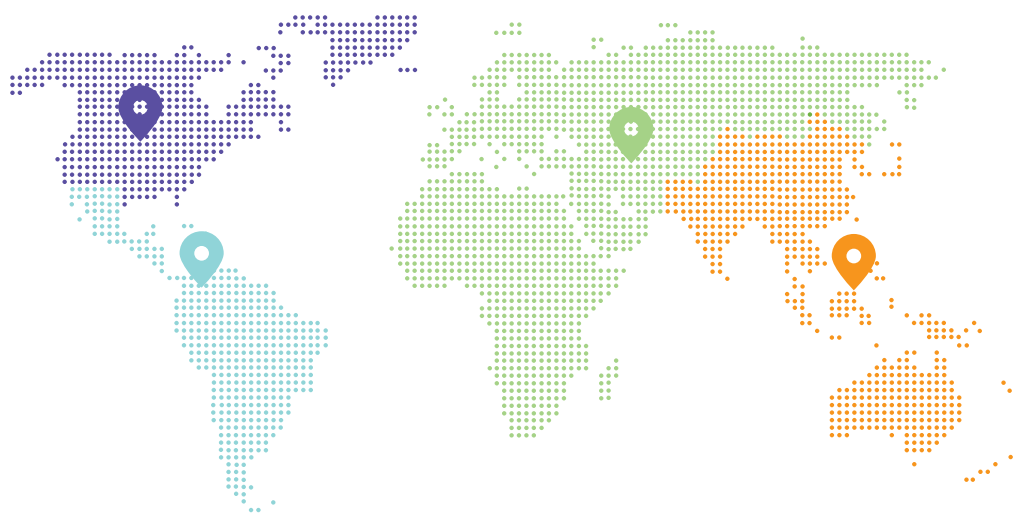
- **Advance replacement of faulty unit** with unit shipped within eight working hours of incident ticket acknowledgement meaning a maximum of two business days after claim.
- **100% coverage of electronic parts and failed batteries** excluding battery misuse and/or reduced autonomy.
- **Free shipping** from the following European countries: Austria, Belgium, Croatia, Czech Republic, France, Germany, Ireland, Italy, Luxemburg, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, The Netherlands, Turkey, and United Kingdom.
- **24x7 access** to professional helpline.

### Key Benefits:

- Reduces the worry about critical equipment downtime.
- Ensures rapid recovery in the event of failure (within 24-48 hours).

#### Power Emergency

Technical support Hotline	24/7
Parts included	✓
Response time	✓ 8 working hours
Contract duration	5 years (10 with renewal)



### 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 **28**
- Service Centers **250+**
- Service Field Engineers **2,650+**
- Technical Support/Response **300+**
- Customer Experience Centers/Labs **16**



#### US and Canada

- Manuf. and Assembly Locations **13**
- Service Centers **100+**
- Service Field Engineers **850+**
- Technical Support/Response **120+**
- Customer Experience Centers/Labs **4**



#### Latin America

- Manuf. and Assembly Locations **1**
- Service Centers **20+**
- Service Field Engineers **240+**
- Technical Support/Response **20+**
- Customer Experience Centers/Labs **2**



#### Europe, Middle East And Africa

- Manuf. and Assembly Locations **9**
- Service Centers **70+**
- Service Field Engineers **590+**
- Technical Support/Response **90+**
- Customer Experience Centers/Labs **5**



#### Asia Pacific

- Manuf. and Assembly Locations **5**
- Service Centers **60+**
- Service Field Engineers **970+**
- Technical Support/Response **80+**
- Customer Experience Centers/Labs **5**

## Technical Specifications - 1U Rack Models

Model Number	EDGE-500IRM1U	EDGE-1000IRM1U	EDGE-1500IRM1U
Rating (VA/W)	500VA/450W	1000VA/900W	1500VA/1350W
<b>Dimensions, mm</b>			
Unit (W x D x H)	438 x 380 x 44	438 x 480 x 44	438 x 600 x 44
Shipping (W x D x H)	550 x 620 x 200	570 x 700 x 200	570 x 780 x 200
<b>Weight, kg</b>			
Unit	11	17	23
Shipping	17	23	31
<b>Input AC Parameters</b>			
Nominal VoltageSetting	230V	230V	230V
Voltage Range Without Battery Operation (230V default)	166 - 278	166 - 278	166 - 278
Frequency Range (Hz)	55 - 65	55 - 65	55 - 65
Input Power Connector	IEC60320 C14	IEC60320 C14	IEC60320 C14
Surge Protection (J)	624	624	624
<b>Output AC Parameters</b>			
Output Receptacles	3 + 3 IEC320 C13	3 + 3 IEC320 C13	3 + 3 IEC320 C13
Output Receptacles - Controllable	Yes - 1 group	Yes - 1 group	Yes - 1 group
Output Voltage	200/208/220/230/240	200/208/220/230/240	200/208/220/230/240
Waveform (Battery Operation)	Sine Wave	Sine Wave	Sine Wave
Transfer Time	4 - 6 ms Typical	4 - 6 ms Typical	4 - 6 ms Typical
Output (AC Mode) Overload	106% - 125% @ 60 s 126% - 150% @ 50 s 151% - 200% @ 2 s	106% - 125% @ 60 s 126% - 150% @ 50 s 151% - 200% @ 2 s	106% - 125% @ 60 s 126% - 150% @ 50 s 151% - 200% @ 2 s
Efficiency (full load, line mode, typ)	96%	97%	97%
<b>Battery</b>			
Type	Valve-regulated, non-spillable, lead acid	Valve-regulated, non-spillable, lead acid	Valve-regulated, non-spillable, lead acid
Quantity & Voltage & Capacity	2 x 6V x 9Ahr	4 x 6V x 9Ahr	6 x 6V x 9Ahr
Recharge Time (Internal batteries, typical)	3 hr @ 90%	3 hr @ 90%	3 hr @ 90%
Compatible External Battery Cabinet	--	--	--
<b>Environmental</b>			
Operating Temperature (°C) (*)	0 to 40	0 to 40	0 to 40
Storage Temperature (°C)	-25°C to +55°C without battery inside	-25°C to +55°C without battery inside	-25°C to +55°C without battery inside
Relative Humidity (Operation)	20% to 90%	20% to 90%	20% to 90%
Operating Altitude (m)	3000	3000	3000
Audible Noise (line mode)	<40dB normal mode, <70% load <45dB AVR mode, >70% load	<40dB normal mode, <70% load <45dB AVR mode, >70% load	<40dB normal mode, <70% load <45dB AVR mode, >70% load
Form Factor	Rack (1U)	Rack (1U)	Rack (1U)
<b>Agency</b>			
Compliance	CE, CB Report	CE, CB Report	CE, CB Report
Safety	EN60020-1:2008+A1:2013	EN60020-1:2008+A1:2013	EN60020-1:2008+A1:2013
Transportation	ISTA 2A	ISTA 2A	ISTA 2A
<b>Warranty</b>			
Warranty	2 years	2 years	2 years

(\*) Note: operation at >40°C power derating applies. Please check User Manual



## Technical Specifications - Tower Models

Model Number	EDGE-750IMT	EDGE-1000IMT	EDGE-1500IMT
Rating (VA/W)	750VA/675W	1000VA/900W	1500VA/1350W

### Dimensions, mm

Unit (W x D x H)	145 x 370 x 220	145 x 370 x 220	145 x 480 x 220
Shipping (W x D x H)	230 x 450 x 325	230 x 450 x 325	230 x 570 x 325

### Weight, kg

Unit	11	12	18
Shipping	13	13	20

### Input AC Parameters

Nominal VoltageSetting	230V	230V	230V
Voltage Range Without Battery Operation (230V default)	166 - 278	166 - 278	166 - 278
Frequency Range (Hz)	55 - 65	55 - 65	55 - 65
Input Power Connector	IEC60320 C14	IEC60320 C14	IEC60320 C14
Surge Protection (J)	624	624	624

### Output AC Parameters

Output Receptacles	3 + 2 IEC320 C13	3 + 3 IEC320 C13	3 + 3 IEC320 C13
Output Receptacles - Controllable	Yes - 1 group	Yes - 1 group	Yes - 1 group
Output Voltage	200/208/220/230/240	200/208/220/230/240	200/208/220/230/240
Waveform (Battery Operation)	Sine Wave	Sine Wave	Sine Wave
Transfer Time	4 - 6 ms Typical	4 - 6 ms Typical	4 - 6 ms Typical
Output (AC Mode) Overload	106% - 125% @ 60 s 126% - 150% @ 50 s 151% - 200% @ 2 s	106% - 125% @ 60 s 126% - 150% @ 50 s 151% - 200% @ 2 s	106% - 125% @ 60 s 126% - 150% @ 50 s 151% - 200% @ 2 s
Efficiency (full load, line mode, typ)	95%	96%	97%

### Battery

Type	Valve-regulated, non-spillable, lead acid	Valve-regulated, non-spillable, lead acid	Valve-regulated, non-spillable, lead acid
Quantity & Voltage & Capacity	2 x 12V x 9Ahr	2 x 12V x 10Ahr	4 x 12V x 9Ahr
Recharge Time (Internal batteries, typical)	3 hr @ 90%	3 hr @ 90%	3 hr @ 90%
Compatible External Battery Cabinet	--	--	--

### Environmental

Operating Temperature (°C) (*)	0 to 40	0 to 40	0 to 40
Storage Temperature (°C)	-25°C to +55°C without battery inside	-25°C to +55°C without battery inside	-25°C to +55°C without battery inside
Relative Humidity (Operation)	20% to 90%	20% to 90%	20% to 90%
Operating Altitude (m)	3000	3000	3000
Audible Noise (line mode)	<40dB normal mode, <70% load <45dB AVR mode, >70% load	<40dB normal mode, <70% load <45dB AVR mode, >70% load	<40dB normal mode, <70% load <45dB AVR mode, >70% load
Form Factor	Tower	Tower	Tower

### Agency

Compliance	CE, CB Report	CE, CB Report	CE, CB Report
Safety	EN60020-1:2008+A1:2013	EN60020-1:2008+A1:2013	EN60020-1:2008+A1:2013
Transportation	ISTA 2A	ISTA 2A	ISTA 2A

### Warranty

Warranty	2 years	2 years	2 years
----------	---------	---------	---------

(\*) Note: operation at >40°C power derating applies. Please check User Manual

## Technical Specifications - 2-3Us Rack/Tower models

Model Number	EDGE-1500IRT2UXL	EDGE-22000IRT2UXL	EDGE-3000IRT2UXL	EDGE-3000IRT3UXL
Rating (VA/W)	1500VA/1350W	2200VA/1980W	3000VA/2700W	3000VA/2700W
<b>Dimensions, mm</b>				
Unit (W x D x H)	438 x 510 x 88	438 x 630 x 88	438 x 630 x 88	438 x 485 x 132
Shipping (W x D x H)	565 x 700 x 240	600 x 800 x 240	600 x 800 x 240	550 x 670 x 282
<b>Weight, kg</b>				
Unit	20	27	32	36
Shipping	30	35	42	42
<b>Input AC Parameters</b>				
Nominal VoltageSetting	230V	230V	230V	230V
Voltage Range Without Battery Operation (230V default)	166 - 278	166 - 278	166 - 278	166 - 278
Frequency Range (Hz)	55 - 65	55 - 65	55 - 65	55 - 65
Input Power Connector	IEC60320 C14	IEC60320 C20	IEC60320 C20	IEC60320 C20
Surge Protection (J)	624	624	624	624
<b>Output AC Parameters</b>				
Output Receptacles	3 + 3 IEC320 C13	3 + 3 IEC320 C13 + 1 IEC320 C19	3 + 3 IEC320 C13 + 1 IEC320 C19	6 + 3 IEC320 C13 + 1 IEC320 C19
Output Receptacles - Controllable	Yes - 1 group	Yes - 1 group	Yes - 1 group	Yes - 1 group
Output Voltage	200/208/220/230/240	200/208/220/230/240	200/208/220/230/240	200/208/220/230/240
Waveform (Battery Operation)	Sine Wave	Sine Wave	Sine Wave	Sine Wave
Transfer Time	4 - 6 ms Typical	4 - 6 ms Typical	4 - 6 ms Typical	4 - 6 ms Typical
Output (AC Mode) Overload	106% - 125% @ 60 s 126% - 150% @ 50 s 151% - 200% @ 2 s	106% - 125% @ 60 s 126% - 150% @ 50 s 151% - 200% @ 2 s	106% - 125% @ 60 s 126% - 150% @ 50 s 151% - 200% @ 2 s	106% - 125% @ 60 s 126% - 150% @ 50 s 151% - 200% @ 2 s
Efficiency (full load, line mode, typ)	97%	97%	98%	98%
<b>Battery</b>				
Type	Valve-regulated, non-spillable, lead acid	Valve-regulated, non-spillable, lead acid	Valve-regulated, non-spillable, lead acid	Valve-regulated, non-spillable, lead acid
Quantity & Voltage & Capacity	4 x 12V x 9Ahr	6 x 12V x 7Ahr	6 x 12V x 10Ahr	6 x 12V x 10Ahr
Recharge Time (internal batteries, typical)	3 hr @ 90%	3 hr @ 90%	3 hr @ 90%	3 hr @ 90%
Compatible External Battery Cabinet	GXT5-EBC48VRT2U(E)	GXT5-EBC72VRT2U(E)	GXT5-EBC72VRT2U(E)	GXT5-EBC72VRT2U(E)
<b>Environmental</b>				
Operating Temperature (°C) (*)	0 to 40	0 to 40	0 to 40	0 to 40
Storage Temperature (°C)	-25°C to +55°C without battery inside	-25°C to +55°C without battery inside	-25°C to +55°C without battery inside	-25°C to +55°C without battery inside
Relative Humidity (Operation)	20% to 90%	20% to 90%	20% to 90%	20% to 90%
Operating Altitude (m)	3000	3000	3000	3000
Audible Noise (line mode)	<40dB normal mode, <70% load <45dB AVR mode, >70% load	<40dB normal mode, <70% load <45dB AVR mode, >70% load	<40dB normal mode, <70% load <45dB AVR mode, >70% load	<40dB normal mode, <70% load <45dB AVR mode, >70% load
Form Factor	Rack / Tower (2U)	Rack / Tower (2U)	Rack / Tower (2U)	Rack / Tower (3U)
<b>Agency</b>				
Compliance	CE, CB Report	CE, CB Report	CE, CB Report	CE, CB Report
Safety	EN60020-1:2008+A1:2013	EN60020-1:2008+A1:2013	EN60020-1:2008+A1:2013	EN60020-1:2008+A1:2013
Transportation	ISTA 2A	ISTA 2A	ISTA 2A	ISTA 2A
<b>Warranty</b>				
Warranty	2 years	2 years	2 years	2 years

(\*) Note: operation at >40°C power derating applies. Please check User Manual

## Vertiv™ EDGE Runtime Tables

### EDGE 1U Rack Models

Load %	VA	W	EDGE-500IRM1U Internal Batteries Only	Load %	VA	W	EDGE-1000IRM1U Internal Batteries Only	Load %	VA	W	EDGE-1500IRM1U Internal Batteries Only
100	500	450	5	100	1000	900	5	100	1500	1350	5
70	350	315	9	70	700	630	9	70	1050	945	9
50	250	225	15	50	500	450	15	50	750	675	15
20	100	90	42	20	200	180	42	20	300	270	42

### EDGE Tower models

Load %	VA	W	EDGE-750IMT Internal Batteries Only	Load %	VA	W	EDGE-1000IMT Internal Batteries Only	Load %	VA	W	EDGE-1500IMT Internal Batteries Only
100	750	675	5.9	100	1000	900	5	100	1500	1350	6
70	525	473	10	70	700	630	9	70	1050	945	10
50	375	338	17	50	500	450	15	50	750	675	17
20	150	135	47	20	200	180	43	20	300	270	49

### EDGE 2U-3Us Rack/Tower models

Load %	VA	W	EDGE-1500IRT2UXL Internal Batteries Only	+1 EBC	+3EBCs	+6EBCs
100	1500	1350	6	27	85	177
70	1050	945	10	45	132	266
50	750	675	17	68	192	382
20	300	270	49	179	466	898

Load %	VA	W	EDGE-22000IRT2UXL Internal Batteries Only	+1 EBC	+3EBCs	+6EBCs
100	2200	1980	4.4	26	84	177
70	1540	1386	8	42	130	266
50	1100	990	14	65	192	385
20	440	396	39	170	461	898

Load %	VA	W	EDGE-3000IRT2UXL & EDGE-3000IRT3UXL Internal Batteries Only	+1 EBC	+3EBCs	+6EBCs
100	3000	2700	6	19	61	129
70	2100	1890	10	33	96	196
50	1500	1350	16	51	144	286
20	600	540	43	137	350	672



**Vertiv.com** | Vertiv Headquarters, 1050 Dearborn Drive, Columbus, OH, 43085, USA

© 2020 Vertiv Co. All rights reserved. Vertiv, and the Vertiv logo are trademarks or registered trademarks of Vertiv Co. All other names and logos referred to are trade names, trademarks or registered trademarks of their respective owners. While every precaution has been taken to ensure accuracy and completeness herein, Vertiv Co. assumes no responsibility, and disclaims all liability, for damages resulting from use of this information or for any errors or omissions. Specifications are subject to change without notice.

SL-70583 (R06/20)