Vertiv™ Edge UPS

500 - 3000 VA 230 V

Superior Power Protection
for Edge Applications

Vertiv™ Edge UPS

The Vertiv™ Edge UPS: Best-in-class battery backupand power protection for Edge applications, telecom and distributed IT equipment.

Vertiv Edge is a family of highly reliable, efficient, manageable and flexible line interactive sinewave UPSs, with models ranging from 500VA to 3000VA in 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.

Tower
(750/1000/1500 VA)

- Compact Tower design for tower servers and/or applications with no available rack

- Plug and play solution requiring no installation

- Vertiv Intellislot management cards available for remote power management and OS's shutdown

1U Rack Mount
(500/1000/1500 VA)

- Compact 1U Rack Mount design for Edge applications with limited rack space

- Comes with rack mounting hardware included

- Vertiv Intellislot management cards available for remote power management and OS's shutdown

Rack / Tower
(1500/2200/3000 VA 2U, 3U)

- 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 3U height with short depth (<500 mm) for compact racks that still require maximum power protection

- Vertiv Intellislot management cards available for remote power management and OS's shutdown

Vertiv™ Edge Highlights

LCD display

Color and graphic LCD display for an intuitive user interface

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: tower, 1U rack mount and rack/tower

High output powerfactor (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 external battery cabinets with auto-detection

Leading technology

Advanced AVR design (2 x boost / 1 buck taps) for a more stable output voltage regulations

Controllable outlets

Enables load shedding of non-critical loads, so critical loads can have longer runtime

Vertiv™ Edge UPS

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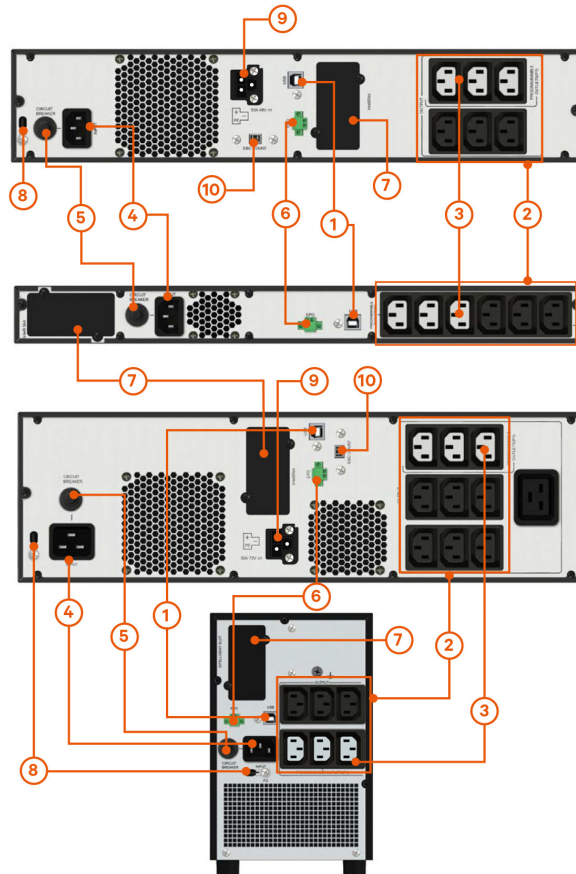
Vertiv Edge UPSs are also highly manageable, with a colorful, graphical LCD screen for easy, intuitive on-site management, as well as optional SNMP support. Vertiv Edge is compatible with the free Vertiv Power Assist software for local UPS status and shutdown of IT loads connected locally or Vertiv Power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

A standard 3-years warranty for both electronics and batteries protects your UPS investment.

What's in the box

- Vertiv™ Edge UPS
- USB type A to B Cable
- Quick Installation Guide and Safety Instructions
- Adjustable 4-post rack mounting kit (not included with Tower models)
- Rackmounting ears/hardware
- Stabilizing feet for tower configuration (Rack/Tower models Only)
- UPS management software (free download from vertiv.com)
- 2 x IEC C13 to C14 output cables (1.8 m)
- Input power cables (UK, AUS, Schuko, 1.8 m)

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. Vertiv™ Intellislot® Port for optional management cards
8. Earth terminal
9. External battery cabinet connection
10. Automatic battery detection connector

Vertiv Edge 1500VA 2U Rack/Tower UPS

Vertiv Edge 1000VA 1U Rack UPS

Vertiv Edge 3000VA 3U Rack/Tower UPS

Vertiv Edge 1500VA Tower UPS

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 for energy savings.

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

Maximize Power Protection

High output Power Factor: 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.

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 management cards: For advanced remote monitoring and management of the UPS, including graceful 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 Vertiv™ Liebert® MicroPOD ensures continuous uptime.

Comprehensive Services for Critical Systems

Note	Part Number	Description 1	Description 2	Description 3
Need to order both part numbers at the same time to get all scope for Power Emergency package (8x5). Please see SOW below.	88026970	Edge VRLA 1-3kVA	Start-up/Installation	Power Emergency (8x5) Edge VRLA
	88028371		Power Emergency Business Hour Contract (3 Years)	
Need to order both part numbers at the same time to get all scope for Power Emergency package (24x7). Please see SOW below.	88026978	Edge VRLA 1-3kVA	Start-up/Installation	Power Emergency (24x7) Edge VRLA
	88028372		Power Emergency After Hour Contract (3 Years)	

Power Emergency Package (8X5)

The Power Emergency Package provides on-site emergency support with 100% parts and labor coverage and is available for single-phase UPS products up to 3kVA. Adding Vertiv services to your Vertiv Edge VRLA UPS ensures you are protected during an emergency. Includes:

- Three-year service coverage
- Guaranteed 2-4hours on-site emergency response, 5 days/week, 8 hours/day, within 100 kms of a Vertiv's Service City.
- Includes 24x7 professional Helpline
- Advanced replacement of the faulty unit
- Shipping costs are covered by Vertiv
- Coverage for both electronic parts and battery failures
- Start-up / Installation services
    - Start-up Services provide on-site technical support for installation and start-up of your UPS for you get up and running as quickly as possible during business hours.
        - Installation includes mounting the new UPS and powering it up
        - Configuring the IS-Webcard and make sure that it is online in their network (optional item)
        - Services performed by a Vertiv factory trained technician

Power Emergency Package (24X7)

The Power Emergency Package provides on-site emergency support with 100% parts and labor coverage and is available for single-phase UPS products up to 3kVA. Adding Vertiv services to your Vertiv Edge VRLA UPS ensures you are protected during an emergency. Includes:

- Three-year service coverage
- Guaranteed 2-4hours on-site emergency response, 7 days/week, 24 hours/day, within 100 kms of a Vertiv's Service City.
- Includes 24x7 professional Helpline
- Advanced replacement of the faulty unit
- Shipping costs are covered by Vertiv
- Coverage for both electronic parts and battery failures
- Start-up / Installation services
    - Start-up Services provide on-site technical support for installation and start-up of your UPS for you get up and running as quickly as possible 24x7.
        - Installation includes mounting the new UPS and powering it up
        - Configuring the IS-Webcard and make sure that it is online in their network (optional item)
        - Services performed by a Vertiv factory trained technician

Build Your Total Infrastructure Solution with Vertiv

Discover expert designed IT infrastructure solutions with proven success in diverse environments and countless applications.

Vertiv™ VE Rack
Self-contained 42U server rack designed to simplify equipment installation and provides an additional 6cm of useable depth.

Vertiv™ Edge UPS
Protect mission critical equipment in the event of power loss or extreme power fluctuations.

Vertiv™ Geist™ rPDU
Reliable power distribution with outlet level remote monitoring and management providing the highest level of power visibility and control.

Cable and Air Flow Management
Included accessories ensure proper cable management and airflow to keep your equipment cool.

Software and IT Management
Monitor the entire system either locally or remotely to ensure you are alerted of out-of-range conditions that could result in costly downtime.

Technical Specifications - 1U Rack Mount Models

Model Number	EDGE-500IRM1U	EDGE-1000IRM1U	EDGE-1500IRM1U
Rating (VA/W)	500VA/450W	1000VA/900W	1500VA/1350W
Dimensions, mm			
Unit (W x D x H)	438 x 380 x 43	438 x 480 x 43	438 x 600 x 43
Shipping (W x D x H)	550 x 620 x 200	570 x 700 x 200	570 x 780 x 200
Weight, kg			
Unit	11	16	23
Shipping	17	23	30
Input AC Parameters			
Nominal Voltage Setting		230V	
Voltage Range Without Battery Operation (230V default)		166 - 278	
Frequency Range (Hz)		45 - 65, autosensing	
Input Power Connector		IEC60320 C14	
Surge Protetion (J)		624	
Output AC Parameters			
Output Receptacles		3 + 3 IEC60320 C13	
Output Receptacles - Controllable		Yes - 1 group	
Output Voltage		200/208/220/230/240	
Waveform (Battery Operation)		Pure sine wave	
Transfer Time		4 - 6 ms Typical	
Output (AC Mode) Overload		106% - 125% @ 60 s; 126% - 150% @ 50 s; 151% - 200% @ 2 s	
Efficiency (full load, line mode, typ)	96%	97%	97%
Battery			
Type		Valve-regulated, non-spillable, lead acid	
Recharge Time (internal batteries, typical)		3 hr @ 90%	
Environmental			
Operating Temperature (ºC)		0 to 40	
Storage Temperature (ºC)		-25ºC to +55ºC without battery inside	
Relative Humidity (Operation)		20% to 90%	
Operating Altitude (m)		3000	
Audible Noise (line mode)		<40dB normal mode, <70% load; <45dB AVR mode, >70% load"	
Form Factor		Rack (1U)	
Agency			
Compliance		CE, CB Report, EAC, RCM, UKCA	
Safety		IEC/EN62040-1	
Trasnportatiion		ISTA 2A	
Environmental		RoHS2 / REACH / WEEE	
Warranty			
Warranty		3 years	

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 480 x 220
Shipping (W x D x H)		230 x 450 x 325	230 x 570 x 325
Weight, kg			
Unit	13	14	20
Shipping	15	16	23
Input AC Parameters			
Nominal Voltage Setting		230V	
Voltage Range Without Battery Operation (230V default)		166 - 278	
Frequency Range (Hz)		45 - 65, autosensing	
Input Power Connector		IEC60320 C14	
Surge Protetion (J)		624	
Output AC Parameters			
Output Receptacles		3 + 2 IEC60320 C13	3 + 3 IEC60320 C13
Output Receptacles - Controllable		Yes - 1 group	
Output Voltage		200/208/220/230/240	
Waveform (Battery Operation)		Pure sine wave	
Transfer Time		4 - 6 ms Typical	
Output (AC Mode) Overload		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	
Recharge Time (internal batteries, typical)		3 hr @ 90%	
Environmental			
Operating Temperature (ºC)		0 to 40	
Storage Temperature (ºC)		-25ºC to +55ºC without battery inside	
Relative Humidity (Operation)		20% to 90%	
Operating Altitude (m)		3000	
Audible Noise (line mode)		<40dB normal mode, <70% load; <45dB AVR mode, >70% load	
Form Factor		Tower	
Agency			
Compliance		CE, CB Report, EAC, RCM, UKCA	
Safety		IEC/EN62040-1	
Trasnportatiion		ISTA 2A	
Environmental		RoHS2 / REACH / WEEE	
Warranty			
Warranty		3 years	

Technical Specifications - 2-3U Rack/Tower models

Model Number	EDGE-1500IRT2UXL	EDGE-2200IRT2UXL	EDGE-3000IRT2UXL	EDGE-3000IRT3UXL
Rating (VA/W)	1500VA/1350W	2200VA/1980W	3000VA/2700W	3000VA/2700W
Dimensions, mm				
Unit (W x D x H)	438 x 510 x 86	438 x 630 x 86		438 x 485 x 132
Shipping (W x D x H)	565 x 700 x 240	600 x 760 x 240		550 x 670 x 282
Weight, kg				
Unit	21	27	34	34
Shipping	26	33	39	
Input AC Parameters				
Nominal Voltage Setting		230V		
Voltage Range Without Battery Operation (230V default)		166 - 278		
Frequency Range (Hz)		45 - 65, autosensing		
Input Power Connector	IEC60320 C14		IEC60320 C20	
Surge Protetion (J)		624		
Output AC Parameters				
Output Receptacles	3 + 3 IEC60320 C13	3 + 3 IEC60320 C13 + 1 IEC60320 C19		6 + 3 IEC60320 C13 + 1 IEC60320 C19
Output Receptacles - Controllable		Yes - 1 group		
Output Voltage		200/208/220/230/240		
Waveform (Battery Operation)		Pure sine wave		
Transfer Time		4 - 6 ms Typical		
Output (AC Mode) Overload		106% - 125% @ 60 s; 126% - 150% @ 50 s; 151% - 200% @ 2 s		
Efficiency (full load, line mode, typ)	97%	97%	98%	98%
Battery				
Type		Valve-regulated, non-spillable, lead acid		
Recharge Time (internal batteries, typical)		3 hr @ 90%		
Compatible External Battery Cabinet	GXT5-EBC48VRT2U		GXT5-EBC72VRT2U	
Environmental				
Operating Temperature (ºC)		0 to 40		
Storage Temperature (ºC)		-25ºC to +55ºC without battery inside		
Relative Humidity (Operation)		20% to 90%		
Operating Altitude (m)		3000		
Audible Noise (line mode)		<40dB normal mode, <70% load; <45dB AVR mode, >70% load		
Form Factor		Rack / Tower (2U)		Rack / Tower (3U)
Agency				
Compliance		CE, CB Report, EAC, RCM, UKCA		
Safety		IEC/EN62040-1		
Trasnportatiion		ISTA 2A		
Environmental		RoHS2 / REACH / WEEE		
Warranty				
Warranty		3 years		

Accesories and Options

Vertiv™ Liebert® MicroPOD – Maintenance Bypass and Output Distribution

The Liebert® MicroPOD (Power Output Distribution) is a maintenance bypass option for UPS products, 3kVA and below. It allows removal of the UPS without powering down the connected equipment.

UPS Model	MicroPOD Model	Input socket	Output receptacles
EDGE-500IRM1U EDGE-1000IRM1U EDGE-1500IRM1U EDGE-1500IRT2UXL	MP2-210K	IEC60320-C14	8 IEC60320-C13
EDGE-2200IRT2UXL EDGE-3000IRT2UXL EDGE-3000IRT3UXL	MP2-220L	IEC60320-C20	6 IEC60320-C13 & 1 IEC60320-C19

Network Communication Cards and Environmental Sensors

Optional Intellislot cards are compatible with all Vertiv™ Edge UPS systems.

Network Communications	IS-UNITY-SNMP	10/100 Mbit Ethernet SNMP, Device Web Page, with MIB and configuration cable
	IS-UNITY-DP	Same as IS-UNITY-SNMP, plus SN Series environmental sensor support
	IS-RELAY	Intellislot Interface Kit for Relay Contacts
Environmental Sensors	SN-T	Modular with single temperature sensor
	SN-TH	Modular with single temperature and humidity sensor
	SN-Z01	Integrated cable with single temperature sensors
	SN-Z02	Integrated cable with three temperature sensors
	SN-Z03	Integrated cable with three temp. sensors & 1 humidity sensor

External Battery Cabinets

UPS Model	External battery cabinet
EDGE-1500IRT2UXL	GXT5-EBC48VRT2U
EDGE-2200IRT2UXL EDGE-3000IRT2UXL EDGE-3000IRT3UXL	GXT5-EBC72VRT2U

Vertiv™ Edge Runtime Tables

Edge 1U Rack Models

Load %	EDGE-500IRM1U Internal Batteries Only			Load %	EDGE-1000IRM1U Internal Batteries Only			Load %	EDGE-1500IRM1U Internal Batteries Only		
	VA	W	Runtimes in minutes		VA	W	Runtimes in minutes		VA	W	Runtimes in minutes
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 %	EDGE-750IMT Internal Batteries Only			Load %	EDGE-1000IMT Internal Batteries Only			Load %	EDGE-1500IMT Internal Batteries Only		
	VA	W	Runtimes in minutes		VA	W	Runtimes in minutes		VA	W	Runtimes in minutes
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	+3 EBC	+6 EBCs
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-2200IRT2UXL Internal Batteries Only	+1 EBC	+3 EBC	+6 EBCs
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	+3 EBC	+6 EBCs
100	3000	2700	6	19	61	129
70	2100	1890	10	33	96	196
50	1500	1350	16	51	144	286

Runtime tool available at:
https://www.vertiv.com/en-asia/support/tools-applications/vertiv-ups-interactive-runtime-tools/vertiv-edge-ups/

Vertiv.com | Asia-Pacific

AP-UPS-EDGE-V2-0522-EN