Features & Benefits

- **Full flexibility and scalability** — one enclosure for various wireless and wireline telecom applications

- **Multiple climate control solutions** — satisfy your specific equipment heat dissipation and environmental demands

- **Increased ability to customize** — diverse configuration, cooling and mounting options available

- **One standard enclosure platform for multiple applications** — means fewer configurations and cabinet types to specify, install and maintain

- **Industry standards** — platform designed to meet Telcordia GR-487-CORE, IP55, UL 2416/NWIN Type 3R, NEMA, NEC as well as other local requirements

- **Environmentally friendly cooling** — low-energy consumption and low-noise fans are ideal for residential areas

- **Pad, pole and wall-mounting options** — accommodate site requirements and limitations

- **Field-upgradable climate units** — door-mounted with slide-off hinge to simplify service and replacement

- **Cabinet controller** — cycles fan to maintain desired temperature, reducing power consumption and acoustic noise

The Vertiv™ XTE 601 Series of integrated outdoor enclosures delivers best-in-class performance and flexibility for a wide variety of wireline and wireless applications.
By leveraging simplicity, flexibility and scalability across the platform, the Vertiv XTE 601 Series provides a rapidly deployable, cost-efficient solution to service providers around the world.

As customer demand increases for high speed and low latency, more equipment is being pushed to the network edge. To provide the proper protection and controlled operating environment for this sensitive equipment and preserve the reliability of your network, Vertiv has developed the Vertiv XTE 601 Series of integrated outdoor enclosure solutions. Its flexibility enables you to support a wide variety of OEM equipment with a single platform, under the wide range of weather extremes, thermal and electrical issues, and physical stresses encountered in the OSP environment.

By standardizing on the Vertiv XTE 601 Series, you simplify network expansion and reduce the burden of stocking service parts, with the confidence that you will be able to deploy any OSP equipment--anywhere in your network – that the next generation of technology is sure to bring.

Description

The Vertiv™ XTE 601 Series platform is a proven structural system, with integrated climate control and power options. Vertiv XTE 601 enclosures are offered in a broad range of standard sizes designated by the rack unit (RU) capacity of the equipment chamber. Sizes range from 8 RU to 32 RU. Single-bay and dual bay enclosures are available as standard configurations, with a variety of door, base and side-chamber (SC) options. Pad, pole and wall mount options are offered.

Protection against destructive weather, thermal, electrical, environmental and mechanical forces is vital to assuring the reliability and revenue-producing capability of your wireless and wireline networks.

Vertiv™ XTE 601 Series — Scalable, Flexible, Global

Outdoor enclosures are available in a broad range of standard sizes designated by the rack unit (RU) capacity of the equipment chamber. Sizes range from 8 RU to 32 RU. Single-bay and dual bay enclosures are available as standard configurations, with a variety of door, base and side-chamber (SC) options.

1. Solar Shield
2. Swing Handle or 1/4 Turn Lock
3. Air Conditioner
4. External Battery Base
5. NetSure™ DC Power System
6. Battery trays
7. Ground Bar
8. Heat Exchanger

Vertiv™ XTE 601 Series (shown with integrated heat exchanger)

Vertiv™ XTE 601 Series (shown with integrated air conditioner)

Vertiv™ NetSure™ 5100 DC Power System

The 19" wide integrated DC power system (582137200) provides up to 150A at -48 VDC, four 2000 watt high efficiency Vertiv™ eSure™ rectifiers and a distribution panel with (2) load breakers, (2) battery breakers and (12) GMT fuse positions.

1. Distribution Panel
2. NetSure Control Unit, M830B
3. eSure™ Rectifier, R48-2000e3

3

Vertiv™ XTE 601 Series

Typical Configurations

Vertiv™ XTE 601 enclosures are designated by rack units (RU). The height of the cabinet is determined by the required rack space, solar shield, and battery base or plinth options.

The cabinet footprint (width and depth) is determined by the number of equipment bays (2 maximum) and side chambers (2 maximum). See Dimension Table on page 7 and 8.

Solar shields are available on all Vertiv XTE 601 cabinets for maximum thermal system performance.

Enclosure Options

Materials and finishes

Both external panels and enclosure frame are aluminum and feature an off white polyester powder coating. All exterior cabinet surfaces and components are corrosion and UV resistant.

Racks

Fixed equipment racks are available in both 23" (612 mm) and 19" (510 mm) sizes with industry-standard EIA hole spacing. Swing racks are standard options for cabinets between 12 RU and 27 RU. Additional swing rack options are available upon request.

Climate controls/thermal

Door-mounted climate control options include air conditioners (850 to 19,000 BTU) equipped with internal heaters, air-to-air heat exchangers (1000W to 2800W), and fan/filters. (See the table on page 10) Enclosures ordered with air conditioners incorporate insulation to maximize cooling capacity.

Heat exchangers, and fan/filters are controlled by the Vertiv XTE 601 Cabinet Controller that turns fans on and off to maintain equipment chamber temperature within designated limits. It also reduces fan speed at low load or low ambient temperature to reduce power consumption and minimize acoustic noise. The controller reports fan failures and extreme high and low temperatures as alarms. The controller also monitors door intrusion alarms (remote and audible).

Heat exchangers, and fan/filter climate systems are available with +24VDC and -48VDC voltage inputs.

DC Power Systems

Vertiv XTE 601 Enclosures can be integrated with NetSure DC Power systems to deliver constant power to meet load and recharge requirements. Systems are available in -48 VDC output from 30 to 400 Amps with distribution and low voltage disconnect (LVD) options.

AC Systems

AC options include a 4x4 junction box, power distribution panel/load center with AC distribution, and GFCI-protected outlets.

Standardizing on a single enclosure platform increases your network reliability, leaves less chance for errors, simplifies network expansion, and reduces the burden of stocking service parts and repairing damage to panels, doors and other enclosure components.

Power transfer switch

Vertiv™ XTE PTS units are available to provide primary AC surge protection. The load center offers 100 amp or 200 amp main service. Numerous configurations are offered, utilizing switching, distribution and circuit protection components from world-class manufacturers. The Vertiv XTE PTS is manufactured from weather-resistant exterior components and can be mounted adjacent to the Vertiv™ XTE 601 Series cabinet. It meets NEMA3R rainproof requirements.

Acoustics

See "Climate controls/thermal" regarding fan speed reduction to reduce noise.

Battery options

Internal and external battery compartments and 23" battery racks or battery shelves are available. Battery kits are rated up to 210Ah.. A battery heater pad kit is optional.

Mounting options

All enclosures may be pad mounted. Generic installation plinths with cable entrance provisions and battery compartment plinths are offered for pad mountings. Pour-in-place pad templates are also available. Single-bay cabinets with up to two side chambers may be pole-mounted utilizing the optional pole mount kit..

Security systems

Vertiv XTE 601 enclosure security systems include quarter-turn cam latch or and push-to-lock swing-handle door locks. All locks include padlock hasps for additional security. An intrusion alarm is offered with local and remote indication.

Accessories

Accessories include an emergency generator connector and transfer system (requires load center), smoke detector and lighting.

Application

The Vertiv™ XTE 601 Series of enclosures houses a variety of next-generation electronic equipment for both wireline and wireless outside plant applications where physical protection and environmental stability are required.

Enclosure Assembly, Integration and Testing

Vertiv has the industry experience and in-house product knowledge to recommend, engineer, integrate, implement and support Vertiv XTE 601 enclosures that you can confidently deploy as your network grows. When we configure a new Vertiv XTE 601 Series enclosure in one of our regional configuration centers, we integrate the climate control, DC power and backup, alarms, accessories and customer equipment. Prior to production, a skilled test team operates the completed enclosure in our thermal and acoustic chambers. If necessary, we modify the configuration to reduce the chance of encountering any unexpected glitches once the units are installed in the field.

The local presence of a global organization

To be profitable, your wireline and wireless networks must be properly deployed and individual sites must perform reliably, night and day. Vertiv understands this and offers a wide array of global installation and support services.

Our experienced technicians will conduct site surveys of your current installations, and recommend and engineer the necessary enclosure and power solutions to accomplish your goals. We will prepare prints and other documentation and prestage and configure all equipment to assure efficient installation. We will install and test enclosures and power systems prior to going on line. And we will provide post-installation maintenance contracts and emergency services to keep all systems running efficiently.

In short, you can focus on keeping your customers connected, knowing you have Vertiv global service coverage, with over 150 service locations worldwide and 2,000 certified professionals with local knowledge behind you.

Vertiv™ XTE 601 Series Technical Specifications

Enclosure Mounting

All Enclosures	Pad mount
Single Bay Cabinets (up to two side chambers)	Pole mount
Maximum Cabinet Dimensions for Pole Bracket Kit (W x D)	30" x 25" (762 mm x 635 mm)
Maximum Cabinet Dimensions for Pole Chair Kit (W x D)	54" x 25" (1372 mm x 635 mm) and 42" x 46" (1067 mm x 1168 mm)
Equipment Mounting	
Vertical Rack Spaces (standard)	8RU to 32RU - Refer to table for standard rack unit options Custom rack units can be provided upon request between 8RU and 32RUs
Hole Spacing	Standard EIA spacing; untapped holes for 12-24 thread forming hardware
Rack Widths	23" (584 mm) EIA fixed racks are standard 23" (584 mm) EIA swing rack available as option 19" (483 mm) EIA available as option
Center Mounting	Accepts standard 12" (533 mm) deep, center mount equipment (5" front, 7" rear)
Environmental Protection	
Finish	Off-white, polyester powder coat
Thermal Protection	
Heat Dissipation	Refer to "Climate Control Options" table on following page for details
Temperature Alarms	Temperature alarms provided with each cabinet
Controller	Available with heat exchangers
Electrical	
AC System Options	4 X 4 AC junction box, 115Vac, 60 Hz, 15 amp 8-position load center, 120/240VAC, 60 Hz, 100A 12-position load center, 120/240VAC, 60 Hz, 125A 220VAC, 15A Twist Lock Receptacle Kit 220VAC, 30A Twist Lock Receptacle Kit
Convenience Outlets (GFCI protected)	One provided in equipment chamber or side chamber
Generator Connection (optional)	30 amp and 60 amp generator inlet kits are available
Battery Compartment	
Battery Options	Ventilated external battery compartment Battery Shelf (internal to cabinet) for use with 32"D cabinets only Riser Kit – [Two stacked battery compartments, ventilated, 31-inch height (787.4 mm)]
Compatible Batteries & Amp-Hour Reserve	Supports 12 VDC front post batteries (-48VDC and +24VDC)
Battery Size Capacity	Supports Up to 22.1" (561mm) D x 4.9" (124mm) x 12.6" (316mm)
Available Area per String (external battery compartment)	13.8" H x 21.38" W x 22.98"D (351 mm x 543 mm x 584 mm)
Battery Heater Pad Kit (optional)	Thermostat control "On" at 40° F, "Off" at 60° F For use with external battery compartment and riser kit

Security

Padlockable Quarter-turn Cam Latch	Tamper resistant 216-type tool or Hex-pin (doors and removable panels)
Padlockable Swinghandle Cam Latch	Tamper resistant 216-type tool or Hex-pin (doors)
Intrusion Alarm	Intrusion alarm with local indication and remote location options
Access Covers	Battery compartement and cable covers are only accessible when cabinet doors are open

Bonding and Grounding

Ground Bar	One 10-position, dual holed, copper buss, 3/16" (5 mm) thick, 1/4-20 hardware One ground bar is included in the equipment chamber for cabinets without side chamber(s)

Cable entrance

Single Bay Cabinets (25" Depth)	(2) 3" (76 mm) cable entrance cones
Single Bay Cabinets (32" Depth)	(3) 3" (76 mm) cable entrance cones
Cabinets with Side Chambers (25" Depth)	(2) 4" (102 mm) cable entrance cones standard per side chamber
Cabinets with Side Chambers (32" Depth)	(3) 4" (102 mm) cable entrance cones standard per side chamber
Cabinets with Side Chambers (46" Depth)	Up to (4) 4" (102 mm) cable entrance cones standard per side chamber (limitations may apply; cable dressing bracket provided with protection panel kit)

Vertiv™ XTE 601 Series

Cabinet Ordering Guide

Cabinet Type	Vertiv™ XTE 601	
Rack Units per Equipment Bay	08 = 8 rack units in each bay (standard rack units: 08, 12, 17, 22, 27, 32)	
Door Configuration	S = Single-sided cabinet (front door and rear lift off panel) D = Dual sided cabinet (front & rear doors)	
Equipment Bays	1 = One bay 2 = Two bays	
Side Bays	0 = No side bay 1 = One side bay 2 = Two side bays	
AC Type	0 = None J = 4x4 junction box, 115VAC 1 = 8-position 100A load center	2 = 12-position 125A load center 3 = 220VAC, 15A, twist lock receptacle kit 4 = 220VAC, 30A, twist lock receptacle kit
Battery*	0 = No base B = External Battery Compartment	I = Internal Battery Shelf R = Battery Riser Kit (Two tier)
Solar Shield	0 = No shield S = Solar shield (standard)	
Cooling System*	**Heat Exchangers** H1 = 1000W H2 = 14500W H3 = 2800W	**Air Conditioners** A1 = 850 BTU w/150W heater A2 = 2000BTU w/500W heater A3 = 4000BTU w/1000W heater A4 = 8000BTU w/2000W heater A5 = 19000BTU w/3000W heater
Door Security/Locking	1 = Quarter-turn Cam Latch – Hex/Pin 2 = Quarter-turn Cam Latch – 216 (7/16 Hex)	3 = Swinghandle Cam Latch – Hex/Pin 4 = Swinghandle Cam Latch – 216 (7/16 Hex)
Generator Connection	0 = No connection option A = 30 Amp B = 60 Amp	

Specify +24VDC or -48VDC.

Standard Cabinet Height and Rack Unit Count

Fixed Racks			Swing Racks			Height					
						Equipment Chamber		Equipment Chamber W/ Solar Shield		External Battery Base*	
Rack Units	Inches	Mm	Rack Units	Inches	Mm	Inches	Mm	Inches	Mm	Inches	Mm
8	14.00	356	—	—	—	22.22	565	24.78	630	14	356
12	21.00	534	9	15.75	400	27.51	699	30.07	764	14	356
17	29.75	756	14	24.50	622	36.26	922	38.82	987	14	356
22	38.50	978	19	33.25	845	45.01	1144	47.57	1209	14	356
27	47.25	1201	24	42.00	1067	53.76	1366	56.32	1431	14	356
32	56.00	1423	—	—	—	62.51	1588	65.07	1653	—	—

Vertiv™ XTE 601 Series Ordering Information

Cable Footprint (W X D) Inches (Millimeters)	Equipment Chamber Layout				Side Chamber Options		Doors and Panels Options	
	Number of Equipment Bays	Front	Back	Side By Side	Right Side Chamber	Left Side Chamber	Front & Rear Doors	Front Door & Removable Rear Panel
8 RU								
30 x 25 (762 x 635)	1	•					•	•
12 RU								
30 x 25 (762 x 635)	1	•					•	•
42 x 25 (1067 x 635)	1	•			•		•	
17 RU								
30 x 25 (762 x 635)	1	•					•	•
30 x 32 (762 x 813)	1	•			•		•	•
42 x 25 (1067 x 635)	1	•			•		•	
42 x 46 (1067 x 1168)	2	•	•				•	
22 RU		•						
30 x 25 (762 x 635)	1						•	•
27 RU								
30 x 25 (762 x 635)	1	•					•	•
30 x 32 (762 x 813)	1	•			•		•	•
42 x 25 (1067 x 635)	1	•			•		•	
42 x 46 (1067 x 1168)	2	•	•		•	•	•	
54 x 25 (1372 x 635)	1	•			•	•	•	
72 x 32 (1829 x 813)	2			•	•		•	
84 x 32 (2134 x 813)	2			•	•	•	•	
32 RU							•	
30 x 32 (762 x 813)	1	•					•	•

Note:
1 Vertiv™ XTE 601 Series custom 38 RU and 43 RU enclosures are available upon request.
2 All Vertiv XTE 601 enclosures are available with or without an external battery compartment.

Vertiv™ XTE 601 Series

Climate Control Options

Rack Units	Heat Exchangers[1]	Air Conditioners	Fan/Filter*
8	1000W	850 BTU with 150W internal heater	–
12	1000W	850 BTU with 150W internal heater	–
17	1000W 1450W	2000 BTU with 500W internal heater 4000 BTU with 1000W internal heater	Door mounted
22	1000W 1450W	2000 BTU with 500W internal heater 4000 BTU with 1000W internal heater	Door mounted
27	1000W 1450W 2800W	2000 BTU with 500W internal heater 4000 BTU with 1000W internal heater 8000 BTU with 2000W internal heater 19,000 BTU with 3000W internal heater	Door mounted
32	1000W 1450W 2800W	2000 BTU with 500W internal heater 4000 BTU with 1000W internal heater 8000 BTU with 2000W internal heater 19,000 BTU with 3000W internal heater	Door mounted

[1] Specify +24VDC or -48VDC.

Climate Unit Dimensions

Nominal Rating	Height	Width	Depth	Approximate Weight
1000W heat exchanger	25.125" (638 mm)	18.00" (457 mm)	7.50" (191 mm)	40 lbs (18 kg)
1450W heat exchanger	32.875" (835 mm)	24.75" (629 mm)	7.50" (191 mm)	54 lbs (25 kg)
2800W heat exchanger	49.56" (1259 mm)	24.75" (629 mm)	7.50" (191 mm)	95 lbs (43 kg)
850 BTU HVAC w/150W internal heater	15.75" (400 mm)	7.50" (191 mm)	6.30" (160 mm)	37 lbs (17 kg)
2000 BTU HVAC w/500W internal heater	20.00" (508 mm)	10.00" (254 mm)	9.90" (251 mm)	66 lbs (30 kg)
4000 BTU HVAC w/1000W internal heater	28.97" (736 mm)	17.00" (432 mm)	11.3" (287 mm)	127 lbs (58 kg)
8000 BTU HVAC w/2000W internal heater	43.00" (1092 mm)	15.75" (400 mm)	11.0" (279 mm)	155 lbs (70 kg)
19,000 BTU HVAC w/3000W internal heater	52.85" (1342 mm)	20.85" (530 mm)	13.0" (330 mm)	237 lbs (108 kg)

Vertiv™ XTE 601 Series Mounting Accessories (Part Numbers)

Non-seismic

Footprint Dimensions (W x D)	Pad Template	Pole Kit–Chair	Pole/Wall Kit–Bracket	6" Plinth	Riser Kit
30" x 25" (762 m m x 635 mm)	F1009326	F1009327	F1009328	F1010143	F1010386
42" x 25" (1067 mm x 635 mm)	F1009331	F1009333	–	F1010112	–
54" x 25" (1372 mm x 635 mm)	F1009333	F1009342	–	–	–
30" x 32" (762 mm x 813 mm)	F1009332	F1009343	–	F1009330	–
42" x 46" (1067 mm x 1168 mm)	F1009685	–	–	–	–
72" x 32" (1829 mm x 813 mm)	F1009336	–	–	–	–
84" x 32" (2134 mm x 813 mm)	F1009337	–	–	–	–

Seismic

Footprint Dimensions (W x D)	Pad Template	Pole Kit–Chair	Pole/Wall Kit–Bracket	6" Plinth	Riser Kit
30" x 25" (762 m m x 635 mm)	F1009326	F1010429	–	F1010423	F1010416
42" x 25" (1067 mm x 635 mm)	F1009331	F1010431	–	F1010425	F1010417
54" x 25" (1372 mm x 635 mm)	F1009333	F1010432	–	–	F1010419
30" x 32" (762 mm x 813 mm)	F1009332	F1010430	–	F1010424	F1010418
42" x 46" (1067 mm x 1168 mm)	F1009685	–	–	–	–
72" x 32" (1829 mm x 813 mm)	F1009336	–	–	–	–
84" x 32" (2134 mm x 813 mm)	F1009337	–	–	–	–