Vertiv™ SmartCabinet™ ID

Delivering up to 7.0 kW of cooling with advanced IP54 environmental protection for critical IT deployed in demanding environments

Protect your data from demanding environments.

Vertiv believes in a world where critical technologies always work. One of the biggest challenges in industrial environments is extreme conditions with dust, dirt, humidity, and temperature fluctuations.

The Vertiv™ SmartCabinet™ ID has been designed with IP54* environmental protection for these challenging environments where dirt and humidity could severely impact system performance and life expectancy. By isolating the IT equipment housed inside the rack, the SmartCabinet™ ID provides full protection and peace of mind to IT system managers.

High efficiency cooling
Designed with an inverter compressor, the cooling unit provides 0-100% capacity modulation, to match cooling capacity with the IT load of the system and allowing for expansion within the rack as well as future growth of your business.
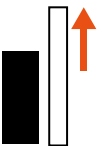
Monitor and Control
The 9" HMI display comes standard with sate of the art communication capabilities, providing Single Pane Of Glass monitoring locally and remotely giving all stakeholders instant access to critical data.

Added protection for less secure environments
When your business depends on the data being managed by the IT equipment, security is a top priority. Ensure that your data is secured with intelligent locks and an emergency backup fan for added peace-of-mind.

Enhance your solution with compatible Vertiv products
The SmartCabinet ID delivers a full and robust IT solution when utilizing the Vertiv™ Liebert® GXT5 UPS and select Vertiv™ Geist™ Intelligent rPDUs.

*IP54 - Ingress Protection class according to IEC 60529: Protection against dust (5) and splashing water (4)

More features with fewer headaches

Feature-Packed Rack

The new Vertiv™ SmartCabinet™ ID comes standard in 24U or 42U options, has a large glass door to view equipment, and an integrated 9" touchscreen display for continuous monitoring. With IP54 protection and door locks, the Vertiv SmartCabinet™ ID eliminates the need to design and build a separate conditioned and secure IT space.

Integrated Power Management

Pre-integrated with a Power Management Block (PMB), the Vertiv™ SmartCabinet™ ID provides power to both the indoor evaporator and outdoor condenser. The PMB can be powered through facility cable or through a UPS for added reliability and extra run-time!

Flexible Heat Rejection

The heat rejection unit can be mounted outdoors, next to the rack, or even on the roof of the rack. With multiple mounting options, install the SmartCabinet ID in a wide range of applications!

Space-saving Cooling

Highly efficient and cost effective cooling, packed into a confined space without utilizing any U-Space! Choose between two options: 3.5kW and 7.0kW.

Fully Sealed Micro Data Center with Integrated Cooling

VS3350I   ZCL03C
42U, 3.5kW Cooling Capacity

VS3354I   ZCL03C
24U, 3.5kW Cooling Capacity

VS3750I   ZCL07C
42U, 7.0kW Cooling Capacity

Outdoor heat rejection
Ensure proper temperature control inside the rack with outdoor heat rejection. And with the option to mount the condenser on the roof of the rack, added flexibility is built in.

Zero-U cooling solution
The Zero-U cooling solution maximizes the investment in your business by utilizing the full cabinet, allowing for more IT equipment to be installed.

Integrated power distribution
Enable your IT investment to stay protected and online by installing a rack PDU on the pre-integrated mounting brackets. For added visibility, choose from select intelligent Vertiv™ Geist™ rPDU models that are compatible with the integrated HMI display (rPDU's sold separately).

Fully sealed rack
IP54 rating protects mission-critical IT equipment from dust and water, providing a longer life to the equipment and peace of mind to business owners.

HMI display with built-in communications
Easy remote access for monitoring and management of power, thermal conditions, and unit security, allowing for more precise control over your most valuable assets.

Emergency backup power
Reliable backup operations in the event of utility power failure through the use of the Vertiv™ Liebert® GXT5 UPS (sold separately).

Protect your investment with service offerings from Vertiv
We are here to support you with service solutions for your critical infrastructure and to ensure that your vital applications always work. From thermal management to power and power distribution, the Vertiv™ SmartCabinet™ ID has a full suite of service offerings to help protect your investment and your business.

Download the
Vertiv™ XR app

Scan to view in the Vertiv™ XR App

For more information, visit Vertiv.com or contact your local Vertiv sales representative.

Environmental protection for a fraction of the cost!

Versatile IT Deployments

As technology evolves and your business grows, IT infrastructure becomes ever more important for maintaining optimal IT operation. And not every environment is conducive to housing mission critical IT deployments, so it's important to have a versatile solution that can handle whatever is thrown at it. Proper airflow, space limitations, and noise levels are all major concerns when in a setting near employees or customers, such as retail, education, or banking and finance. Dust, humidity, and temperature fluctuations are a major concern in more industrial environments where the advent of IIoT, automation, and Smart Factories are becoming a standard practice. The Vertiv™ SmartCabinet™ ID was specifically designed to handle all these challenges.
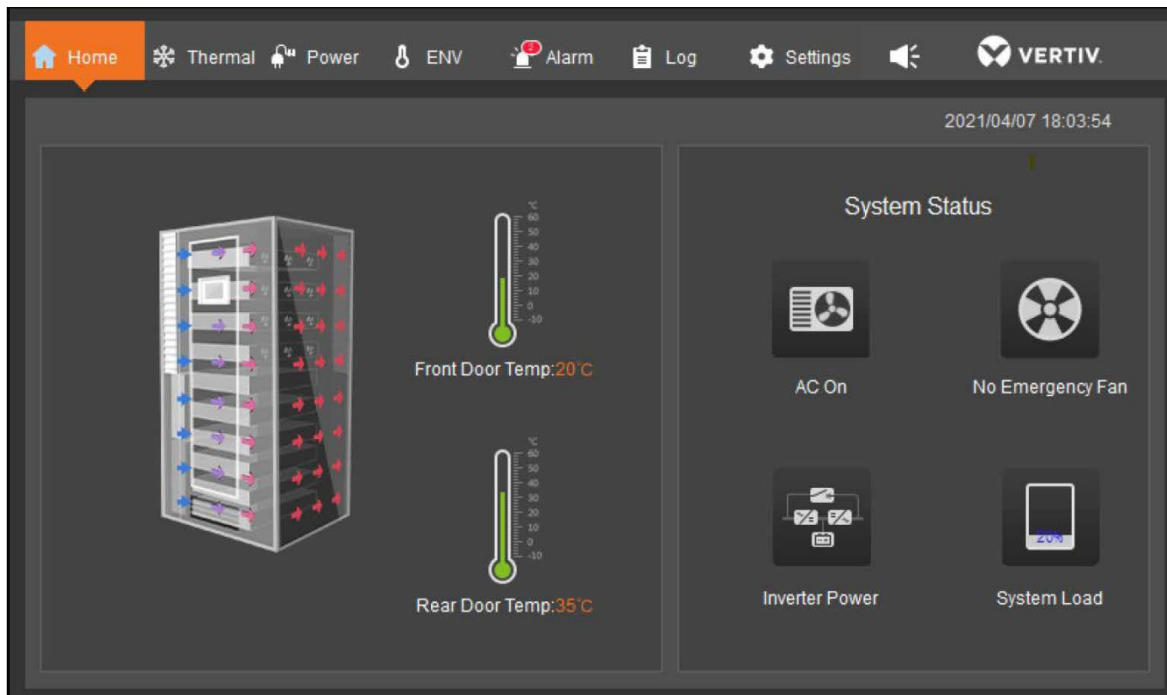
Physical protection of your data

With IP54 rated protection from harsh conditions, the fully sealed cabinet protects business essential IT processing, storage, and networking equipment from potential damage. The fully sealed cabinet also acts to reduce noise levels from the IT equipment, making this an ideal solution for applications where ambient noise levels are of concern to people nearby. In addition to protection from environmental damage, the SmartCabinet ID also delivers temperature and humidity regulation, and can be paired with power distribution and emergency power to ensure the system stays running at optimal conditions. For added installation flexibility, the condensing unit can be mounted outside or even on top of the cabinet.

Invest Intelligently

In many industrial applications, a major threat is damage to the equipment from the harsh environment it is being deployed into. In order to properly protect this mission critical equipment, isolated spaces with filtration, cooling, power, and more are required. However, building a separate room can add a significant amount to infrastructure costs and project timelines to properly protect the deployment.

Considerations of HVAC, electrical, lighting, room security, and drainage all need to be factored in. This adds significant costs and time through contractors, material, and planning. The SmartCabinet™ ID has cooling, power, security, and outdoor heat rejection built into one easy to use and isolated system, all for a fraction of the cost of additional construction in the deployment site.

In addition to this, deployment of the SmartCabinet™ ID takes days instead of months. Don't waste your budget on building a separate room to protect your IT, invest intelligently in a SmartCabinet ID.

Benefits

Fully integrate your critical IT deployment with robust solutions

- Fully sealed cabinet provides 24/7 protection from harsh environmental conditions that could damage IT equipment

- Integrated cooling takes up zero rack U-space, allowing for more IT installation

- Built-in HMI (Human Machine Interface) display with communication capabilities allows for local or remote monitoring and control

- Emergency backup fans ensure proper airflow and avoids overheating

- Multiple rack sizes and cooling capacity options provide flexibility for numerous applications

- Ensure high system availability with uninterrupted backup power with the optional Vertiv™ Liebert® GXT5 UPS

- Integrate your IT deployment with intelligent rack power distribution units for constant monitoring and high system availability

- In order to keep the operating costs as low as possible, the cooling power is adapted to the heat output of the installed IT equipment.

Increasing Efficiency and Visibility

High Cooling Availability

The Vertiv™ SmartCabinet™ ID delivers precision cooling in a controlled and contained environment, isolating your critical IT deployments from harsh conditions that could impact business operations. With the pre-integrated cooling unit designed to take up zero U-space, Vertiv offers a fully protected cabinet that provides full U-space utilization. In addition to occupying zero U-space, the cooling unit was also designed with full 0-100% cooling capacity modulation, delivering the precise amount of cooling that is required at any given time. By adjusting the delivered cooling capacity based on the required IT load, the SmartCabinet™ ID lowers operational costs and manages fluctuations in IT demand throughout the day and as your business scales.

Single-Pane-of-Glass Monitoring

One of the biggest challenges in Edge applications is limited visibility into system status if you are not proximate to the deployment. The SmartCabinet ID addresses this and provides single pane-of-glass monitoring and control capabilities, making data and facility management that much easier for end users. Accessed through a large HMI touchscreen display, the SmartCabinet ID can set and monitor temperature and humidity, power input and usage, alarm history, system status, and more. The SmartCabinet ID offers remote access through a web-based user interface, allowing data center managers fast and convenient monitoring and control over the daily operations regardless of their location.

Vertiv™ SmartCabinet™ ID

Technical Specifications

Vertiv™ SmartCabinet™ ID		42U, 3.5kW Cooling Capacity	24U, 3.5kW Cooling Capacity	42U, 7.0kW Cooling Capacity
SKU	Cabinet	**VS3350I**	**VS3354I**	**VS3750I**
	Condenser	**ZCL03C**	**ZCL03C**	**ZCL07C**
Size	Width	800 mm	800 mm	800 mm
	Depth	1200 mm	1200 mm	1200 mm
	Height	2000 mm	2000 mm	2000 mm
Load Rating	Static Load	1300 kg	1300 kg	1300 kg
	Dynamic Load	1000 kg	1000 kg	1000 kg
Ingress Protection Class according to IEC 60529		IP54	IP54	IP54
Rack unit space	Usable (total incl UPS)	37U (42U)	19U (24U)	37U (42U)

Cooling

	42U, 3.5kW	24U, 3.5kW	42U, 7.0kW
Rated Cooling Capacity*	3.5 kW	3.5 kW	7.0 kW
Capacity Modulation Range	0 to 100%	0 to 100%	0 to 100%
Nominal Air Flow	750 m³/h	750 m³/h	1500 m³/h
Coefficient of Performance (COP), $W_{cooling}/W_{electrical}$	2.9	2.9	2.9
Sound Pressure (at 2m)	< 63 dB(A)	< 63 dB(A)	< 66 dB(A)

Condensing Unit

Size	Width x Depth x Height	1163 mm x 282 mm x 527 mm	1163 mm x 282 mm x 527 mm	990 mm x 355 mm x 1000 mm
	Weight	68 kg	68 kg	106 kg

Compatible UPS (sold separately)

Input Power	Voltage	230V, 1 phase, 50Hz		230V, 1 phase, 50Hz
	Plug	IEC60309 2P+E, 32A, splashproof IP44		without plug (hardwired to customer's electric switchboard)
	Cable length	5 m outside of the cabinet (input on top)		5m outside of the cabinet (input on top)
Outlet Sockets	Number in total	8 (2x C19, 6x C13)		8 (4 x C19, 4x C13)
	Number of free	7 (1x C19, 6 x C13)		8 (4 x C19, 4x C13)
	Used for PDUs	1 x C19		0 (hardwired PDU to UPS)

Compatible PDU (sold separately)

		42U, 3.5kW	24U, 3.5kW	42U, 7.0kW
Total current		16A	16A	32A
Voltage		200 to 240 V	200 to 240 V	200 to 240 V
Frequency / Phase		50 Hz single phase	50 Hz single phase	50 Hz single phase
Height inside the Cabinet		1683mm	864 mm	1683mm
Outlet Sockets	Number in total	24	12	24
	Type	Combi C13/C19	Combi C13/C19	Combi C13/C19
Monitoring	Input Monitoring	Phase (A) Monitoring (kWh, W, VA, PF, V, A)	Phase (A) Monitoring (kWh, W, VA, PF, V, A)	Phase (A) Monitoring (kWh, W, VA, PF, V, A)
	Outlet Monitoring	Outlet Monitoring (kWh, W, VA, PF, V, A)	Outlet Monitoring (kWh, W, VA, PF, V, A)	Outlet Monitoring (kWh, W, VA, PF, V, A)
	Residual Current Metering	Phase (A)	Phase (A)	Phase (A)
	Circuit Monitoring	No	No	Circuit / Breaker Monitoring (A)
Residual Current Metering (RCM)	Type B	Yes	Yes	Yes

Environmental Specifications

	42U, 3.5kW	24U, 3.5kW	42U, 7.0kW
Cabinet Temperature	0 to 45 °C	0 to 45 °C	0 to 45 °C
Evaporator Temperature	18 °C to 45 °C	18 °C to 45 °C	18 °C to 45 °C
Low Ambient Condensing Unit Temperature	-34 °C to 48 °C	-34 °C to 48 °C	-34 °C to 48 °C
Ambient Storage Temperature	-40 °C to 70 °C	-40 °C to 70 °C	-40 °C to 70 °C
Ambient Humidity	For Cabinet: 5% RH to 90% RH (no condensation). For Evaporator: 17% RH to 60% RH. For Storage: ≤ 95% RH at 40 °C		
Altitude	1000m without derating. Contact Vertiv for derating up to < 3000 m		

Vertiv™ SmartCabinet™ ID - Service Offering

Vertiv offers a complete range of warranty extensions and services specifically designed for integrated modular solutions.

The portfolio includes various options to meet any possible customer need.

Extend and Upgrade Warranty Duration Integrated Warranty Extension +2

With this Service Program the Standard Warranty coverage is extended by two years with the addition of Preventive Maintenance and Response Time as well.

It can be purchased within six Months from the Equipment purchase date and it includes:

- Parts, labour and travel, if the repair of a faulty unit is necessary (for UPS, internal or external batteries, or other accessories are not included.)

- Response within 8 working hours from the incident ticket acknowledgment with the on-site intervention of a certified Vertiv technician.*

- 24x7 Professional helpline.

- One annual preventive maintenance performed by a certified Vertiv technician.*

Service Programs for On-site intervention on Integrated Solutions Installation

This Service Program includes the visit of a Vertiv™ technician for the on-site installation of your three-phase equipment. You can purchase it within six months from the Equipment purchase date and you can choose between two scheduling options, 8x5* or 24x7 (excluding public holidays.)

Upgrade Warranty Terms Preferred Warranty 3 years

With this Service Program, the standard warranty is expanded to include Preventive Maintenance and Response Time as well.

It can be purchased within two months from the Equipment purchase date and it includes:

- One annual visit to ensure continuous and optimal equipment performance is included

- Response within 8 working hours from the incident ticket acknowledgment with the on-site intervention of a certified Vertiv technician*

- 24x7 Professional helpline

- For UPS internal or external batteries or other accessories are not included.

Start-Up Visit

This Service Program includes the visit of a Vertiv technician for equipment Start-up. You can purchase it within six months from the Equipment purchase date and you can choose between two scheduling options, 8x5* or 24x7 (excluding public holidays).

This offer is not intended to be used as a repair service in case of three-phase equipment failure.

Please remember that Service Programs need to be registered on our website *(https://www.vertiv.com/en-emea/support/registeryour-product/registration/)* within 30 days from purchase to be activated.

*During normal working hours, excluding public holidays, Saturdays and Sundays. Ticket acknowledgement will communicate the course of action within next business day from customer's claim.