



Schneider Electric – Galaxy VS

Increased availability. Reduced operating costs.
First class power protection for critical infrastructure.

20 – 100 kW
380 / 400 / 415 V



schneider-electric.com/ups

Life Is 

Schneider
Electric

Increased availability. Reduced operating costs. First class power protection for critical infrastructure.

Galaxy VS is a highly efficient, modular, easy-to-deploy 20-100 kW three-phase uninterruptible power supply that delivers top performance to critical IT, commercial, and industrial facilities.

You need best-in-class power protection that is as high-performing and innovative as your business is. Galaxy VS maximizes your availability while minimizing your total cost of ownership, with highly efficient patented technologies and modular architecture.

The Galaxy VS is EcoStruxure™ Ready to give you peace of mind by sending real-time status updates directly to your smartphone. With its robust design and industry-leading performance, Galaxy VS is the ideal backbone for your critical infrastructure.





New patented hybrid technology

Provides up to 97% efficiency in double conversion mode

Electricity savings in full protection mode at every load level



Compact design

High-density technology and full front access make Galaxy VS a footprint saver well suited for confined spaces



Available with Lithium-ion battery*

Long-life, compact, and reliable energy storage



99% efficient in patented EConversion™ mode

Recover your initial investment within two years through energy savings

(*) contact your local representative for availability



Maximum availability thanks to modular architecture

Critical system components built as modules for faster serviceability, fault tolerance, and short mean time to repair



EcoStruxure IT

Anytime, anywhere monitoring and service support via smartphone app*



Well suited for a wide range of applications

- Edge, small, and medium data centers and computer rooms
- Manufacturing facilities
- Telecommunication
- Commercial buildings
- Healthcare
- Transportation

Leading performance

Robust and flexible design ideal for demanding environments at maximum performance



Flexibility and performance

- Unity Power Factor (PF=1) allows for right-size protection to real IT needs.
- Well suited for different applications thanks to high flexibility on power factor and high overload capability
- Seamlessly integrates into electrical environment:
 - Single and dual mains supported
- Faster battery charging capabilities: 2-3 times faster compared to industry standards
- Optimized uptime with wide input tolerance window (+/-15%)
- Right sized batteries with flexible DC bus



Robust design supports both IT and non-IT environments

- Supports a wide range of loads
- Fault-tolerant design ensures continuous protection in critical circumstances
- Designed to perform in dusty environments with its high-quality air filter
- Withstands 40°C operating temperature without derating and up to 50°C with load derating
- Suited for humid environments thanks to conformal coating
- Seismic certified (with option kit)
- Tested to withstand high input short-circuit: 65kA
- Exceeds industry standards on electromagnetic protection due to EMC Level C2



Best energy storage performance with Lithium-Ion battery* options

- Restore backup time quickly
- Protect your load even during repeated power interruptions
- Longer lifetime than classic battery solutions
- Higher predictability and manageability thanks to the built-in battery monitoring system

(*contact your local representative for availability)

Best operational efficiency

Reduce your energy bill

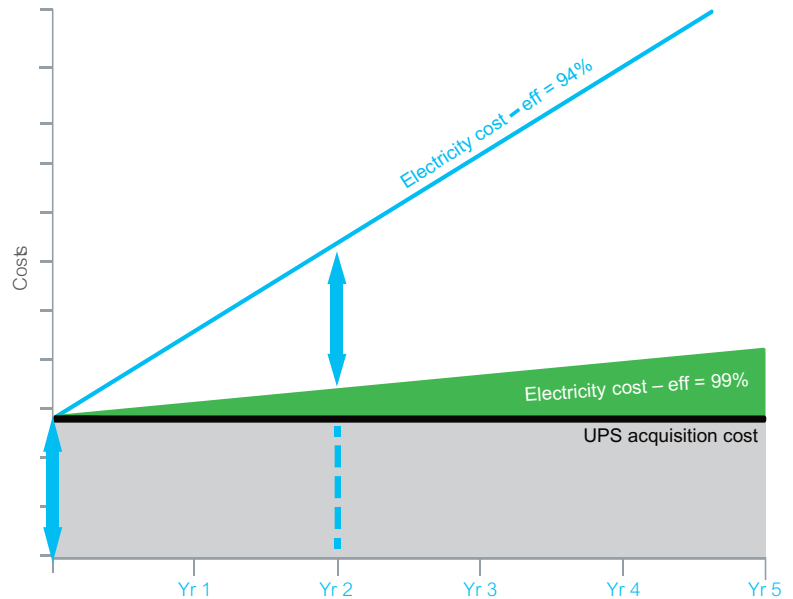
Very high efficiency for small to medium data centers, buildings, and facilities. By using ECOConversion mode, significant savings are achieved every year on your electricity bill. Compared to a legacy design, the savings are equivalent to the UPS acquisition costs after only two years.

ECOConversion: an unbeatable combination of power quality and high efficiency

	Efficiency	Annual electricity savings
ECOConversion	99%	4600 €
Double conversion	97%	2760 €
Legacy design	94%	0 €

Comparison at 100 kW

After only 2 years, electricity savings = UPS acquisition costs



ECOConversion mode

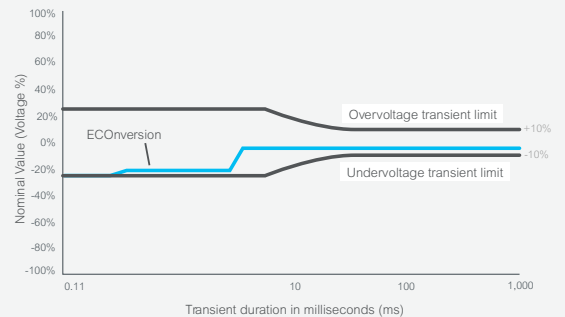
Enjoy the highest energy savings available today without sacrificing load protection – our patented zero-break transfer design offers peace of mind:

- World-class efficiency up to 99%
- Keeps excellent load protection
- Continuously charged batteries
- Compliant with IEC 62040-3 Class 1 output performance of UPS standard
- Input power factor correction and no harmonics

New patented hybrid technology

- Up to 97% efficiency in double conversion online mode even at low load levels
- Uses soft-switch method to reduce losses during double-conversion

* Based on a market electricity price of 0,12\$/kWh. The annual electricity savings are done in comparison with a 94% efficiency standard UPS.



Galaxy VS ECOConversion meets Class 1 of IEC 62040-3: zero-break transfer during power outage.

Faster installation and serviceability

Simplify your installation and maintenance



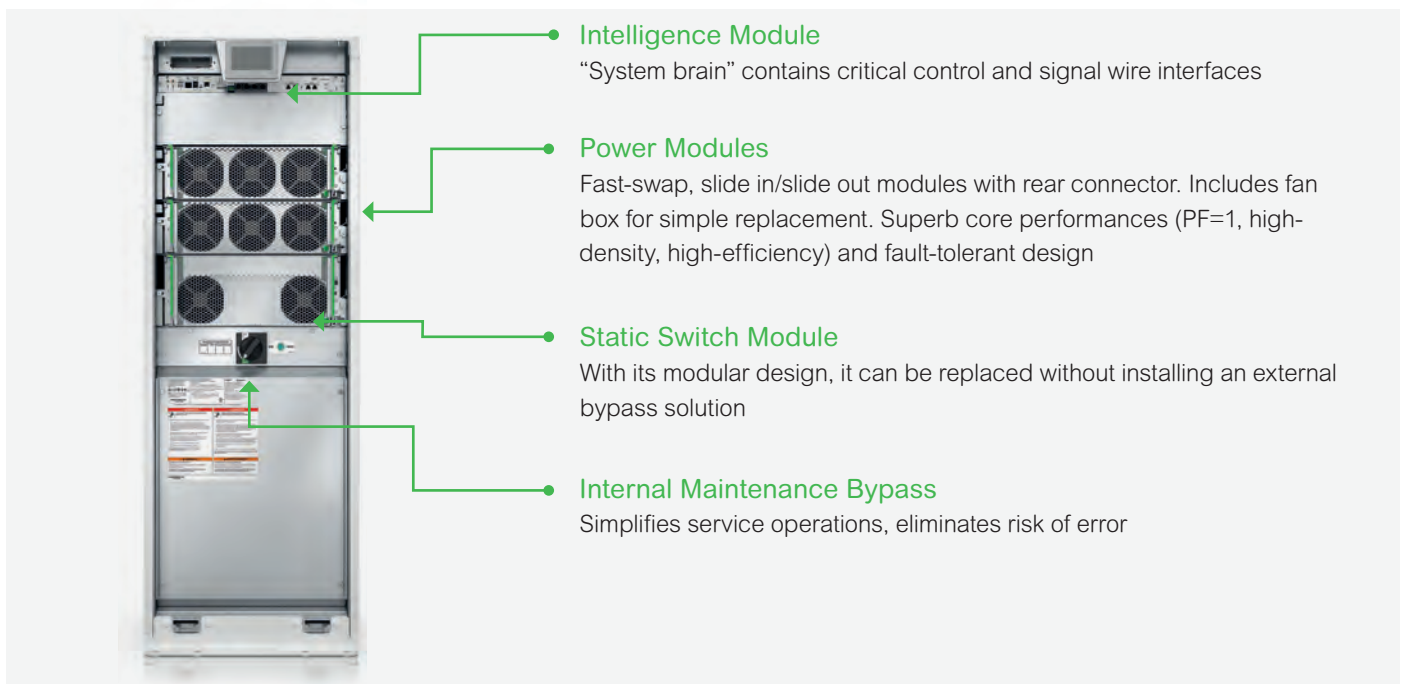
Quick to install and fits everywhere thanks to its compact design

- Lightweight, small footprint, with rolling casters
- Everything you need is included – Network Management Card (NMC), Modbus, single and dual mains, dust filters, and eight dry contacts
- Reduced risk of installation error; the large cabling section is easy to access
- Precise and reliable battery configuration, thanks to predefined battery parameters
- Simply set up a parallel redundant configuration without the need for an external bypass panel; Galaxy VS also supports a common battery bank



Simple to maintain and fast to service thanks to its modular architecture

- Fast mean time to repair thanks to swappable power, bypass, and intelligence modules
- Full front access for simple and fast connection and services
- Easy to stock modular spare parts for service
- Reduces risk of human error by making the bypass transfer sequence easy and intuitive with a simplified, integrated maintenance bypass



Peace of mind

Manage and monitor your Galaxy VS from a smartphone thanks to cloud-based software and services

Connect to EcoStruxure Asset Advisor, our cloud-based remote monitoring service, and optimize your time with access to our 24/7 expert Service Bureau empowered with real-time data.

Are you looking for a monitoring software solution? Learn more on EcoStruxure IT Expert, new to EcoStruxure family: <https://ecostruxureit.com/ecostruxure-it-expert/>

We troubleshoot, you relax



Remote monitoring

24/7 incident monitoring and remote troubleshooting



Mobility

Instant visibility to your Galaxy VS anytime, anywhere via free smartphone app



Recommendations

Online reports with analytics and advice to improve business continuity

Availability of services is country dependent.

Comprehensive on-site services

Provides optimal system lifetime

Start-up service: included with UPS

- Commission the installation in accordance with manufacturer's recommendations. Ensure optimal system performance from Day 1.

Schneider Electric-certified installation services

- Expert configuration of your equipment for optimal performance and reliability.

Maintenance services

- Ensure proper care of your mission-critical applications.
- Preventive maintenance and response time upgrades, where available.

Flexible service plans/on-site extended warranty

- Hassle-free system maintenance.
- Improve uptime at a predictable cost.

Adjusts to multiple environments

Galaxy VS is available with a full range of auxiliaries and options that ensure the best performance in any environment

Auxiliaries

- Classic battery cabinet (with or without batteries)
- Battery breaker box
- Maintenance bypass panel
- Parallel maintenance bypass panel*
- Lithium-ion batteries*

Options

- Seismic kit
- Air filter kit
- Parallel communications kit*



Green Premium Certified

Sustainable business performance, by design.

Learn more: <https://www.schneider-electric.com/en/work/support/green-premium/>





(*) contact your local representative for availability



Lithium-ion batteries*

Classic battery cabinet
(with or without batteries)

Battery breaker box

Maintenance bypass panel

Technical specifications

Galaxy VS	Features
Topology	On-line double conversion
Nominal Power (kW)	20-100 kW
Key features	
Modular elements	Power modules, static bypass switch module, intelligence module
Display	Color touch screen, 4.3 inches, status LED, mimic on display
Communication	Communication card included with ethernet (SNMP) and modbus 8 dry contacts (4 inputs, 4 outputs)
Maintenance bypass	Yes Internal maintenance bypass Optional maintenance bypass panel
Parallel capability	Up to 4 UPS (3+1)
Efficiency	
Double conversion mode	Yes, up to 97%
ECO mode	Yes, up to 99%
ECOversion mode	Yes, up to 99%
Input	
Nominal input voltage	380/400/415 V
Input voltage range (phase to phase)	+/-15%
Single mains/dual mains	Single mains as standard. Easily converted to dual mains.
Input frequency	40-70Hz
Input current total harmonic distortion (THDI)	20 kW: <5% 30-100 kW: <3%
Input power factor	>0.99 @ load >25 %, >0.95 @ load > 15%
Connections	Bottom by default Top (with rear cabling)
Cables	Copper or aluminum
Input short-circuit rating	65kA
Backfeed protection	Included
Output	
Nominal output voltages	380/400/415 V
Load power factor	PF=1 (0.7 leading to 0.7 lagging without derating)
Voltage regulation	+/- 1%
Frequency	50/60Hz +/-0.1% free running
Overload	1 min @ 150%; 10min @ 125%
Output THDU on linear load	<1%
Mechanical	
Size	521 x 1485 x 847 mm (WxHxD)
IP level (Ingress Protection)	IP21
Battery type	VRLA, Li-ion
Nominal DC Bus	480-576V (at ratings 50kW, 100kW) 384-576V (at other ratings)
Charging power	20-40% of full power (selectable)
Environment	
Acoustic noise	57dB (70% load) / 65dB (100% load)
Dust protection	Dust filter included. Conformal coating
Seismic	With optional kit. OSHPD tested

Preliminary specifications – can be subject to changes

Galaxy VM

160/200 kVA – Parallel capable up to 800 kVA

Three-phase power protection



Galaxy VM – trusted partner for your business continuity

Highly efficient, easy-to-deploy, three-phase power protection that seamlessly integrates into the electrical, physical, and monitoring environments of customers' medium data centers, industrial, or facilities applications

- Very high efficiency with multi mode energy management including EConversion technology even at very low load levels
- Robust mechanical design with fully isolated input/output cabinet
- Flexible battery solutions
- Seven-inch, color touch-screen display with a separate mimic diagram

Features and benefits

Highly efficient, easy-to-deploy, three-phase power protection that seamlessly integrates into electrical, physical, and monitoring environments

The Galaxy™ VM is a key component of the fully integrated and comprehensive Schneider Electric™ energy management solution for data centers and industrial applications. Deploying the latest in technology, it lowers energy costs through high efficiency and an EConversion™ mode. State-of-the-art electrical performance options, such as wide input voltage range, high overload and short-circuit capacities, and integrated backfeed protection allow the Galaxy VM to seamlessly integrate into your electrical network to provide excellent power quality. Highly compact, the Galaxy VM also integrates well with facility monitoring systems requirements, offering energy storage flexibility that tailors the solution to your specific needs. It features top and bottom cable entry, full front service access, back-to-the-wall installation, and includes start-up services, making the Galaxy VM one of the easiest UPS units in its class to deploy, install, and maintain.

Galaxy VM

Integration

- Schneider Electric StruxureWare™ software applications and suites
- Electrical network earthing systems
- Facilities infrastructure
- Seismic certified
- Monitoring systems – BMS, modbus, etc.

Energy and cost savings

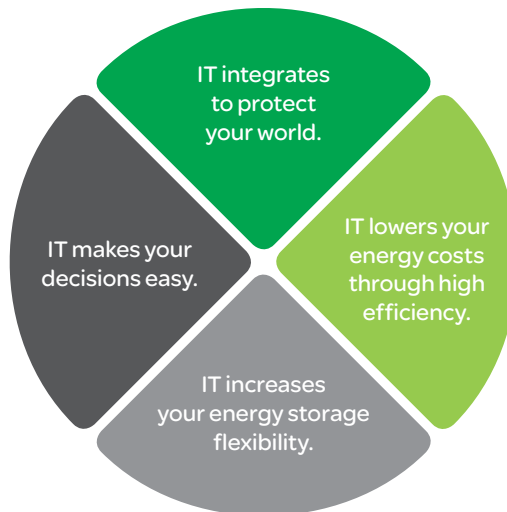
- High-efficiency double conversion mode
- ECO mode
- EConversion mode

Energy storage flexibility

- Traditional (VRLA) and modular battery offer
- Short and long backup times
- Selectable charging modes

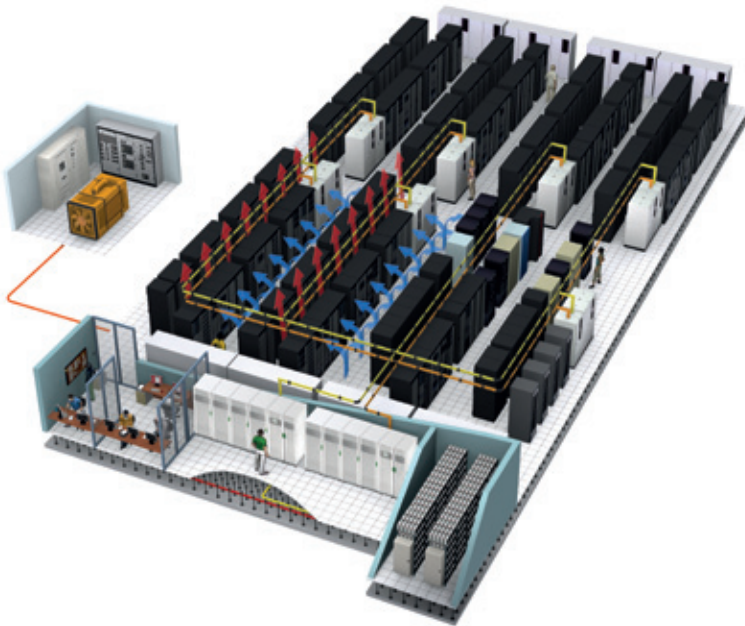
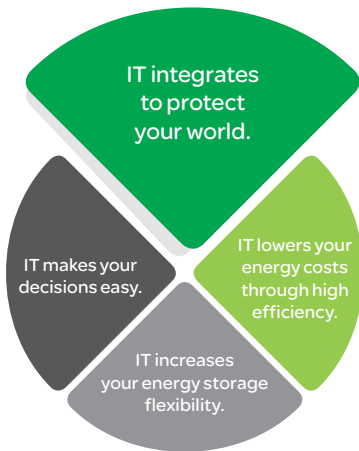
Ease of installation

- System designed for ease of cabling in confined installation spaces
- Single cabinet top and bottom cable entry
- Integrated casters for ease of mobility on UPS and modular battery cabinets



Galaxy VM features

IT integrates to protect your world.



Integration into your electrical network

- Wide input voltage and frequency ranges
- Genset compliant with adaptive ramp-in
- Integrated parallel capability up to five UPS units
- Built-in integrated and tested backfeed protection

Full integration with Schneider Electric solutions

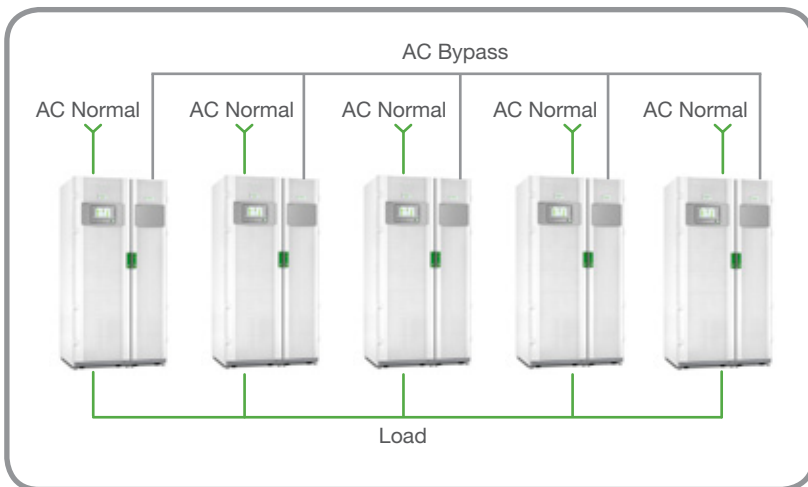
Fully integrates into the comprehensive Schneider Electric energy management solution for data centers and industrial applications

Smart Power Test

Ability to test the UPS at full load without the need to rent a load bank and before bringing customers load on line

Integration into your facility infrastructure

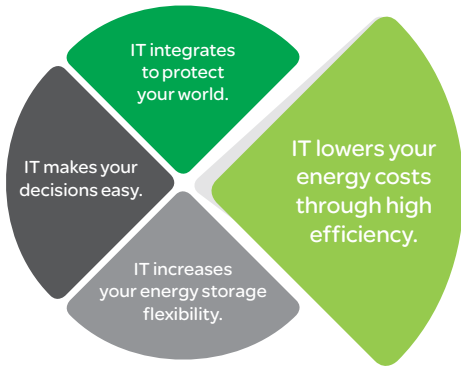
- Compact footprint
- Back-to-the-wall installation
- Operates at 40 °C continuously without de-rating
- Embedded seismic rating, approval for IBC® level 2
- Low audible noise levels
- Replaceable dust filter for harsh environments
- Configurable input/output relays
- Top and bottom cable entry
- Parallel capability to increase multiple UPS systems for capacity or redundancy
- Cold Start: capability to start the UPS on battery without mains power present
- External synchronization capability



Distributed parallel connection for increased power and redundancy

Galaxy VM features

IT lowers your energy costs through high efficiency.



High-efficiency operating modes:

Double conversion mode

- Up to 96.5% efficiency in double conversion online mode even at low load levels
- Less energy losses = cost savings
- Less heat dissipation = lower cooling needed and hence cost savings

ECO mode

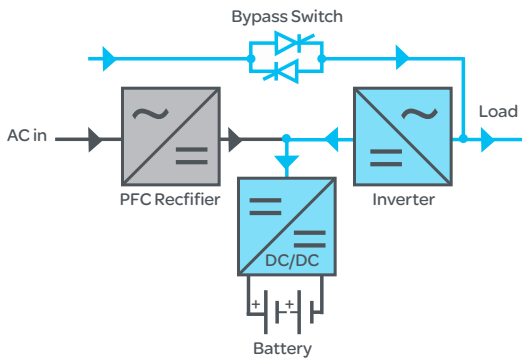
- Up to 99.5% efficiency
- Compliant with IEC® 62040-3 class 3 output definition of UPS standard

ECONversion mode

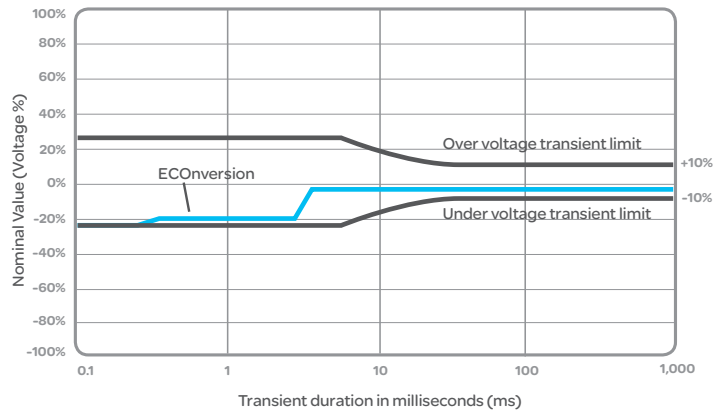
- Ultra high efficiency up to 99%
- Keeps excellent load protection
- Continuously charged batteries
- Compliant with IEC 62040-3 class 1 output definition of UPS standard
- Input power factor correction and no harmonics

ECONversion mode

Enables control of input current to almost same quality as known from on-line UPS



Galaxy VM ECONversion meets Class 1 of IEC 62040-3: zero break transfer during power outage



Cost savings by using Galaxy VM:

Very high efficiency for small to medium data centers, buildings, and facilities

At 100% load	Alternate UPS	Alternate UPS	Alternate UPS
Efficiency	95%	94%	93%
Savings by using Galaxy VM/ year (in ECONversion mode)	€23,700	€29,625	€35,550
Ten-year savings by using Galaxy VM (in ECONversion mode)	€237,000	€296,250	€355,500

Considering a total UPS load of 720 kW (4 x 200 kVA running at 100 percent load).

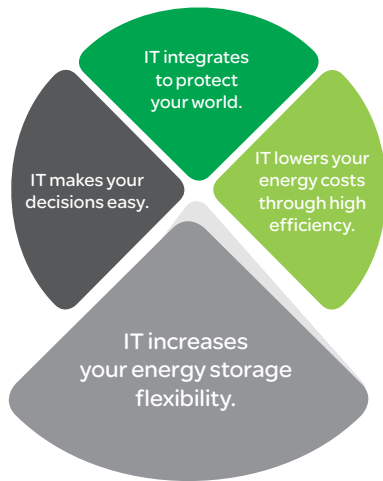
At the national average rate of €0.07/kWh, a 720 kW Galaxy VM installation running in ECONversion mode (99% efficiency) can save €296,250 for ten years compared to a 720 kW UPS with 94 percent efficiency.*

In the same scenario, a Galaxy VM operating in double conversion mode (> 96.5% efficiency) has cost savings equal to €130,350 over five years compared to a 720 kW UPS with 94 percent efficiency.

*Figures calculated using APC™ UPS efficiency comparison calculator are estimates. Individual savings could vary.

Galaxy VM features

IT increases your energy storage flexibility.



Individual battery module monitoring included



Modular battery cabinets

Energy storage options:

- Traditional (VRLA) battery offer
- Modular battery offer: Ease of scaling in smaller increments for adding customizable backup time or for adding redundancy
- Short and extended backup times
- New modular battery offer allows the replacement of batteries without the need to go to bypass, increasing availability—the loads are still protected by the UPS during maintenance
- Traditional battery offers allow you to choose multiple runtime options and charging modes

Galaxy VM options

- Management cards
- Battery DC circuit breaker and fuse kits
- Fuse kit
- Wall-mounted battery breaker boxes
- Parallel system bypass cabinets
- Dust filter kit



Wall-mounted battery breaker box



Management cards



Dust filter kit

Galaxy VM features

IT makes your decisions easy.



From ordering to installation, the Galaxy VM makes your solution choice easy:

Start-up

- 5 x 8 start-up services are included, allowing for full coverage of factory warranty
- Remote monitoring service included for first year

Installation

- Casters allow UPS configurations to be moved easily and installed up against the wall
- Separate I/O cabinet for input and output cabling ensures quick/error free and easy installation
- Top and bottom cable entry standard provides great flexibility to the installer

Monitoring

- 7-inch, color touch-screen display
- Integrated network management capability for easy access to the network
- Integrated battery monitoring capability included for modular battery offer
- Modbus (SCADA and ION-E) capability
- Customizable dry contacts and relays

Galaxy VM management card compatibility chart

SKU/Part number	Description	Protocol supported
Included with Galaxy VM	<ul style="list-style-type: none"> • One plug: Ethernet SNMP (similar to AP9630) • One plug: RS485 modbus RTU • 6 configurable dry contacts IN • 10 configurable dry contacts OUT • 2 free slots for optional communication cards 	<ul style="list-style-type: none"> • HTTP, HTTPS, IPv4, IPv6, NTP, SMTP, SNMP v1, SNMP v3, SSH V1, SSH V2, SSL, TCP/IP, Telnet and MODBUS RTU • Optional com cards : AP9635CH, AP9631, AP9630
AP9635CH	UPS Network Management Card 2 w/ Environmental Monitoring up to 1 sensor, out-of-band access, and modbus capabilities	HTTP, HTTPS, IPv4, IPv6, NTP, SMTP, SNMP v1, SNMP v3, SSH V1, SSH V2, SSL, TCP/IP, Telnet, MODBUS RTU, MODBUS TCP/IP
AP9631	Remote monitoring and control of an individual ups by connecting it directly to the network – card also has environmental monitoring for up to 2 sensors	HTTP, HTTPS, IPv4, IPv6, NTP, SMTP, SNMP v1, SNMP v2c, SNMP v3, SSH V1, SSH V2, SSL, TCP/IP, Telnet
AP9630	Remote monitoring and control of an individual UPS by connecting it directly to the network	HTTP, HTTPS, IPv4, IPv6, NTP, SMTP, SNMP v1, SNMP v3, SSH V1, SSH V2, SSL, TCP/IP, Telnet

StruxureWare for Data Centers software suite

In the data center environment, our Galaxy VM is fully managed through StruxureWare for Data Centers software, an integrated suite of data center infrastructure management (DCIM) applications. It enables businesses to prosper by managing their data centers across multiple domains, providing actionable intelligence for an ideal balance of high availability and peak efficiency throughout the entire data center life cycle. StruxureWare software applications and suites are key elements of Schneider Electric EcoStruxure™ integrated hardware and software system architecture — a system designed for intelligent energy management.



A comprehensive portfolio of services

Schneider Electric Critical Power & Cooling Services (CPCS) provides the expertise, services, and support you need for your building, industry, power, or data center infrastructure. Our world-class life-cycle services offer a smart way to install and maintain your critical applications, ensuring your systems are always running at peak performance.

Assembly and Start-Up Service by a certified Field Service Engineer (FSE) allows full factory warranty coverage. A Schneider Electric-certified installation makes certain your equipment is properly configured for optimal performance. This service features a standard eight-hour, five-day response time, with upgrades available for off-business hours.

On-site warranty extension service

In the case of a system event, an FSE will arrive by the next business day (or faster with upgrades) to isolate, diagnose, and correct in as little time as possible, minimizing downtime.

Advantage plans

Flexible service packages offer smooth system maintenance to improve uptime at a predictable cost. The Advantage Plus, Prime, Ultra, and Max are full-service packages that include technical support, preventive maintenance, quick on-site response, and remote monitoring. Response time upgrades are available.

Remote monitoring service (RMS)

RMS is an economical and easy-to-use Web-based service that lets you quickly respond to environmental or system changes. Trained technicians provide secure 24-hour monitoring of your physical infrastructure to diagnose and resolve events before they become critical.

Preventive maintenance

Preventive maintenance on-site examinations keep your critical systems running at maximum efficiency.

Technical specifications

Rated power (kVA/kW)	160/144	200/180
Normal AC supply input		
Input voltage (V)	250 – 600 V ¹	
Normal and bypass AC inputs	Single input or dual input as standard	
Frequency (Hz)	40 – 70 Hz	
Input power factor	0.99	
THDI	< 3% full load	
Bypass AC input		
Input voltage range	342 – 457 V	
Frequency	50 Hz or 60 Hz	
Output		
Phase-to-phase output voltage (V)	380/400/415 V	
Load power factor	0.9 (0.7 leading to 0.5 lagging without de-rating)	
Output frequency	50/60 Hz +/- 0.1% (free-running)	
Overload capacity utility operation at 40 °C	150% for 1 minute and 125% for 10 minutes	
Output voltage regulation	+/- 1%	
Total harmonic distortion (THDU)	< 2% at 100% linear load; < 3% at 100% non-linear load	
Output voltage tolerance	Symmetric load (0 – 100%): +/- 1% static; asymmetric load: +/- 3% static	
Overall efficiency		
Efficiency at full load (AC-AC) at 100% load	Up to 96.5%	
ECONversion mode (meets EN62040-3 Class 1)	Up to 99% (meets EN62040-3 Class 1)	
Standard ECO mode	Up to 99%	
Communication and management		
Control panel	Multifunction 7" touch screen color LCD display with built-in NMC, modbus (SCADA and ION-E), two empty NMC card slots	
Dimensions and weights		
UPS (H x W x D)	1,970 x 1,003 x 854 mm	
Weight in kg. (UPS) (total -power cabinet plus I/O cabinet)	699 kg	724 kg
Modular battery Cabinet - Narrow (H x W x D), weight without batteries	1,970 x 370 x 854 mm 139 kg	
Modular battery Cabinet - Wide (H x W x D), weight without batteries	1,970 x 700 x 854 mm 210 kg	
Regulatory		
Safety	IEC 62040-1	
EMC/EMI/RFI	IEC 62040-2	
Markings	CE,C-Tick	
Performance	IEC 62040-3, VFI -SS -111	
Transportation	ISTA 2B	
Seismic zone	IBC Level 2:2006	
Environmental		
Operating temperature	0 °C – 40 °C ²	
Storage temperature	-25 °C to 55 °C – without batteries -15 °C to 40 °C – with batteries	
Relative humidity	0% – 95% non-condensing	
Operating elevation	1,000 m. at 100% load	
Storage elevation	0 – 15,000 m.	
Max. audible noise at 1 m from unit	55 dB at 70% load, 65 dB at 100% load	

¹Input voltage = (320 V to Nominal V +20%) for full load. (Nominal V+20% up to 600 V) for 1 min for full load. (250 V – 320 V) load dependant.

²For ambient operating temperature from 40 °C to 50 °C (104 °F to 122 °F), derate the load with 2.5 percent per 1 °C (2.5 per 1.8 °F).



Life Is On



To learn more about the Galaxy VS UPS, EcoStruxure IT cloud-based DCIM, and EcoStruxure Asset Advisor 24x7 Digital Monitoring Services, contact your Schneider Electric representative or visit [schneider-electric.com/ups](https://www.schneider-electric.com/ups).

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