Galaxy VS

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

10–150 kW
380/400/415 V

se.com/gvs

Life Is On | Schneider Electric

Maximize your availability; minimize your total cost of ownership

Galaxy VS is a highly efficient, modular, simple-to-deploy 10–150 kW (400 V) 3-phase uninterruptible power supply (UPS) that delivers top performance to edge, small, and medium data centers, as well as critical infrastructure in commercial and industrial facilities.

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

Galaxy VS meets your internal redundancy needs with N+1 power modules to ensure your load remains protected. This multiplies by 10 the system's availability without extra footprint.

Battery flexibility is one of the main highlights of Galaxy VS. When you choose Galaxy Lithium-ion battery cabinets, you benefit from a longer battery lifetime and higher temperature tolerance than classic battery solutions. When you choose smart battery modules integrated in the UPS cabinet, Galaxy VS offers optimized footprint and ensures critical loads have highly predictable runtimes and battery redundancy.

The Galaxy VS is EcoStruxure™ connected to give you visibility into the health of your UPS and peace of mind by sending realtime status updates directly to your smartphone. With its robust modular design, superior performance, and scalability and Live Swap options, Galaxy VS is the ideal backbone for your critical infrastructure.

99% efficient in patented eConversion mode

Recover your initial investment within two – three years through energy savings.[1]

Compact design. Optimized footprint

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

Battery flexibility, including Lithium-ion batteries[2]

Increase availability and reduce TCO with long-life, intelligent energy storage.

New patented hybrid technology

Provides up to 97% efficiency in double conversion mode.

Electricity savings in full protection mode at every load level.

Maximum availability thanks to modular architecture

Critical system components built as modules for faster serviceability and fault tolerance. N+1 redundancy, scalability, and Live Swap options available.

EcoStruxure IT

Anytime, anywhere monitoring and service support via smartphone app[1].

Well-suited for a wide range of data center and industrial applications

Information technology and commercial buildings

- Edge, small, and medium data centers
- Computer rooms
- Retail/office space
- Manufacturing facilities

Transportation

- Marine (DNV, BV)[3]
- Lighting
- Air traffic control
- Security
- Signaling and communication systems

Healthcare

- Radiology and imaging equipment
- Operating rooms and Intensive Care Units
- Emergency power systems

Minerals, Metals & Mining

- Furnace process control
- Glass plants
- Emergency lighting

Oil & gas

- Refining
- Petrochemicals
- Gas processing control
- Well pumps

Power & Grid

- Thermal plants
- Generator protection
- Hydro turbine control
- Wind farm monitoring

Green Premium™

Green Premium Certified

Sustainable business performance, by design. Learn more: se.com/en/work/support/green-premium/

1 Model-dependent
2 Contact your local representative for availability.
3 Consult your local representative for more information about configuration requirements, including accessory kits.

Leading performance

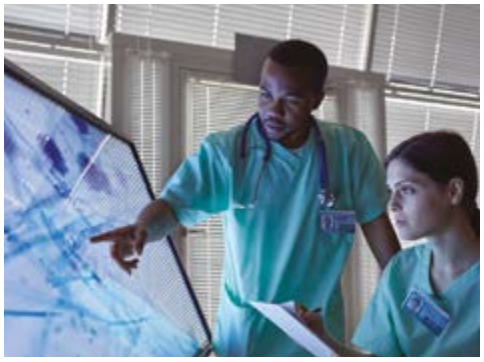
Robust and flexible design, ideal for demanding environments at maximum performance

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 the electrical environment, with single and dual mains support included
- Optimized uptime with wide input tolerance window (+/-15%)
- Right-sized batteries with flexible DC bus

Higher availability: maximum uptime, reduced risk

- One extra power module for **N+1 internal redundancy** keeps your load protected and multiplies system availability by 10 with no extra footprint
- Optimized uptime with wide input tolerance window (+/-15%)
- With **Live Swap***, it is simple and fast to add, replace, or remove power modules
- N+0 or N+1 module-level redundancy
- N+0 or N+1 system-level redundancy (parallel up to 4 UPSs)



Reliable power for IT and non-IT environments

- Robust, fault-tolerant design ensures continuous protection in critical circumstances
- Designed to perform in dusty environments with its high-quality air filter and IP20 rating (optional **IP52 kit** available for select models)
- Withstands **40 °C operating temperature** without derating (50 °C with derating)
- Suited for humid environments thanks to **conformal coating**
- **Seismic certified** (with option kit)
- Maximum short circuit rating: 65 kA
- Exceeds industry standards on electromagnetic protection due to EMC Level C2
- **Faster battery charging** capabilities restore back-up time 2-to-3 times faster compared to industry standards
- Operates at **high elevation,** with no derating up to 3000 m (5000 m with derating)
- Models with **halogen-free** power cables available

* model dependent

Premium protection and sustainability

eConversion: an unbeatable combination of power quality and high efficiency

1x

150 kW Galaxy VS eConversion*

=

10x

Rooftop solar installations

=

16x

Cars powered

=

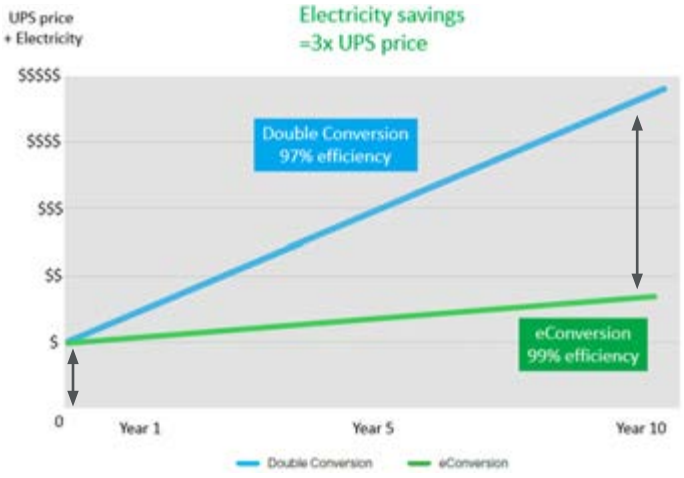
€38,200

Electricity costs saved

Sustainably reduce your operating costs

Protect power to your load, reduce your total cost of ownership and electricity consumption, and meet your sustainability goals with up to 99% efficient, Class 1-compliant eConversion mode for Galaxy V-series UPSs, the recommended operating mode for your Galaxy V-series UPS.*

- By operating at up to **99% efficiency**, the electricity savings in eConversion within 10 years typically equals **3x the price of the UPS**.
- The inverter operates continuously, protecting the load with **no transfer time**. eConversion performance has been certified with the same IEC 62040-3 **Class 1** rating as double conversion mode.
- eConversion mode recharges batteries and provides power factor correction and harmonics compensation, making it a **versatile solution for IT and non-IT loads**.
- Since its launch in 2014, eConversion has been successfully deployed all over the world. Join thousands of customers who use it daily to protect their critical loads.



Calculate your savings

Use our eConversion vs. Double Conversion Calculator to quickly assess your potential energy savings, operating cost optimization, and CO_2 emissions reduction by comparing the cost of running your Galaxy V-Series UPS in eConversion mode vs. double conversion mode.

Scan the QR code with your phone camera, or click here to access the calculator from the Schneider Electric Data Center Trade Off Tools™ Web page.

Learn more about eConversion

*Model dependent; based on a market electricity price: $0.15 /kWh. The annual electricity savings are calculated by comparing the UPS efficiency in eConversion mode vs. double conversion mode.

Meets your needs in multiple environments

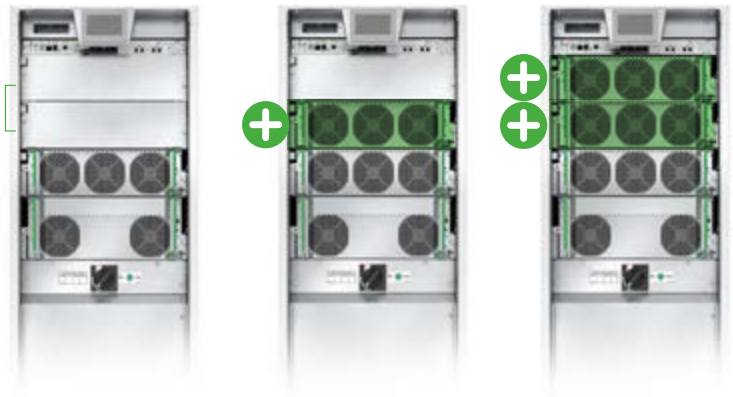
	Galaxy VS for external batteries	Galaxy VS with internal smart battery modules		
400 V	20–150 kW	10–20 kW	10–50 kW	20–100 kW
N+1 redundancy option*	Yes	No	No	Yes
Scalability option*	Yes	No	No	No
Dimensions (HxW)	1500 x 530 mm	1500 x 350 mm	1500 x 530 mm	1970 x 530 mm
Battery type	External. Compatible with Lithium-ion and lead-acid (VRLA)	7Ah (VRLA)	9Ah (VRLA) Standard or long life	9Ah (VRLA) Standard or long life
Battery strings in UPS (maximum)	–	2	4	5
Ingress protection level	IP21 (IP22 and IP52 options)	IP20	IP20	IP20
Special features:	Large cabling section provides convenient access, connection. and installation. Models with Live Swap capability and scalability available.	Models with Live Swap capability available.	Compatible with external modular battery cabinets (up to 6 battery strings). Models with Live Swap capability available.	Compatible with external modular battery cabinets (up to 9 battery strings). Models with Live Swap capability available.

Future-proof your data center

Galaxy VS UPS with optional scalability empower you to right-size your power protection to today's load requirement, then change UPS capacity as your load requirements evolve over time.

- Add 20 kW and 50 kW power modules, combined as needed
- Galaxy VS UPS self-detects the addition of a new power module and automatically updates its configuration setting

In addition, Galaxy VS UPS models with third-party verified Live Swap maximize uptime, availability, and power continuity by enabling you to swap out power modules quickly, with no scheduled downtime.



** See technical specifications table for details*

Faster installation and serviceability

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, air filters, and eight dry contacts
- Precise and reliable battery configuration, thanks to predefined battery parameters
- Set up a simplified 1+1 parallel configuration using the built-in internal maintenance bypass breaker, or use an external maintenance bypass panel to configure parallel installations for capacity or redundancy
- Supports a common battery bank for parallel installations
- Supports installation with NEMA® 2-hole lugs

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

- Fast mean time to repair, thanks to swappable power, static switch, battery, and intelligence modules
- Full-front access for simple and fast connection and service (Galaxy VS for external batteries)
- Reduces risk of human error and load drop, and enhances employee protection:
  - For Galaxy VS UPSes with the Live Swap option, it is simple and fast to add, replace, or remove a power module while the Galaxy VS UPS is online and fully operational, increasing protection for your employees
  - Galaxy VS self-detects the new power module and automatically updates its configuration settings, delivering more uptime and convenience
  - If needed, the easy and intuitive guided maintenance bypass transfer sequence on the display helps you easily transfer to and from maintenance bypass and monitors the system breaker status

Modular design benefits

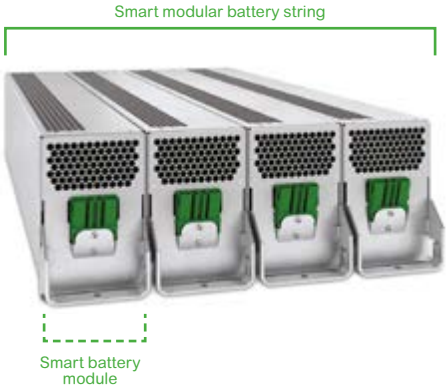
1. **Intelligence module**
   "System brain" contains critical control and signal wire interfaces
2. **Scalability option**
   Add new power module anytime as your load evolves
3. **Power modules**
   N+1 redundancy, Live Swap, slide in/slide out modules with rear connectors. Includes fan box for simple replacement. Superb core performances (PF=1, high-density, high-efficiency) and fault-tolerant design
4. **Static switch module**
   Replaceable without installing an external maintenance bypass solution
5. **Internal maintenance bypass**
   Simplifies service operations and reduces risk of error
6. **Smart modular battery strings**
   Integrates smart battery modules in the UPS cabinet, conserving footprint and increasing availability with battery monitoring, additional battery strings, and fast runtime expansion with self-configuring modules

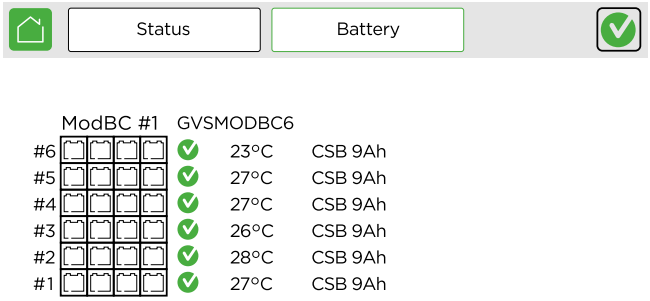
Galaxy VS for external batteries

Galaxy VS with internal batteries

Flexible, intelligent energy storage

Galaxy VS is available with a full range of energy storage options that ensure the best performance in any environment and meet a wide variety of site requirements.





Improved availability, including long-life options

- **Increased availability:** Four smart battery modules form one smart modular battery string. All smart battery modules support the load, so no individual battery is a single point of failure
- **Reduced Mean Time To Repair (MTTR):** Replace a smart battery module in just a few minutes

Battery monitoring included

- **Sensors:** Each smart battery module contains two temperature sensors and a battery identification device for self-configuration
- **Runtime:** The estimate on the display interface updates when smart battery modules are removed or installed
- **Quick status on display:** Use the UPS display to quickly identify and replace an inoperative smart battery module

Accurate anytime replacement

- **Simple:** Push-in and plug; unplug and pull-out
- **Safety first:** Touchproof connectors
- **Self-configuring:** The UPS automatically detects the presence and type of batteries, so the battery configuration is updated accurately

Flexible, high-density energy storage

- **Right-sizing:** Easily increase runtime by adding battery modules or installing battery cabinets
- **High density:** Integrate batteries in the UPS to reduce footprint. No need for service clearance between battery rows

Long-life Galaxy Lithium-ion batteries

As a first mover with a vast installed base, Schneider Electric has developed its own Galaxy Lithium-ion battery solution that also delivers these benefits:

- Double your battery life compared with any VRLA battery, optimizing TCO and achieving sustainability targets
- Recharge 2–3x faster than VRLA solutions
- High temperature tolerance
- Simplify and speed up installation with our internal power supply
- Enhance battery safety with three levels of battery management system (BMS)

Click here

for Lithium-ion / VRLA battery comparison

Classic VRLA batteries

- Quickly install the battery cabinet next to the UPS
- Compact footprint

Visibility and peace of mind

EcoStruxure IT enables resilient, secure, and sustainable data centers and IT environments

Schneider Electric's comprehensive Data Center Infrastructure Management (DCIM) solution, EcoStruxure IT, ensures business continuity by enabling secure monitoring, management, insights, planning, and modeling – whether from a single IT rack to hyper-scale IT – on-premises, in the cloud, and at the edge.

Resilient

Secure

Sustainable

Easy visibility

Monitoring and management software streamlines data center device management:

EcoStruxure IT Expert provides you a hands-on approach with **cloud-based** monitoring software that synthesizes and analyzes performance and alert data into proactive recommendations and enables wherever-you-go visibility from any device. Try it now: www.ecostruxureit.com/ecostruxure-it-expert/#trial

EcoStruxure Data Center Expert is a scalable end-to-end **on-premise** monitoring software that collects, organizes, and distributes critical device information, providing a comprehensive view of your company-wide, multi-vendor physical infrastructure.

24/7 peace of mind

Digital services proactively monitor your critical devices:

EcoStruxure Asset Advisor* for secure power and cooling provides you a hands-off approach with 24/7 remote monitoring service by the Schneider Electric Connected Services Hub experts.

We monitor and troubleshoot, you relax.

Operations, optimized

Planning and modeling software transforms data into performance insights:

EcoStruxure IT Advisor is a data center infrastructure planning and modeling solution that provides Data Center Managers in large enterprises and colocation data centers with full insights into their infrastructure to improve profitability, sustainability, and resiliency.

** Contact your local representative for availability.*

Comprehensive on-site services

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

Options and accessories

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

Batteries

Galaxy Lithium-ion battery cabinets

Classic battery cabinets

Battery breaker box

Modular battery cabinets

Maintenance bypasses

Wall-mount maintenance bypass panel

Parallel maintenance bypass panels

Accessories

- Seismic kit
- Mounting skid for marine or industrial applications*
- Air filter kit
- Parallel communications kit
- IP22 kit
- IP52/NEMA®12 kits**
- Battery breaker kit
- Smart modular battery string
- Smart modular high capacity battery string
- Smart long-life high capacity battery string
- Galaxy VS Live Swap upgrade kit
- Remote Alarm Panel
- Fire Marshal Kit (Japan)

IP52 / NEMA®12 kit for UPS**

IP52 / NEMA®12 kit for battery cabinet**

Mounting skid for marine or industrial applications

** Contact your local representative for availability.*

*** Model dependent; contact your local representative for order details.*

Technical specifications

Galaxy VS	400 V
Topology	On-line double conversion
Nominal power (kW)	10–150 kW (parallel up to 600 kW) [4 UPSs in parallel]
Key features	
Scalability option	50–150 kW
N+1 redundancy option	20–50 kW N+1
Modular elements	Power modules with Live Swap, static switch module, smart battery modules, intelligence module
Display	Color touch screen, 4.3 inches, status LED, mimic on display
High priority for C&I	Network management card included with ethernet (SNMP) and modbus. 8 dry contacts (4 inputs, 4 outputs)
Maintenance bypass	Internal maintenance bypass. Optional maintenance bypass panel
Parallel capability	Simplified 1+1 parallel (for redundancy); Up to 4 UPSs in parallel for capacity or redundancy
Efficiency	
Double conversion mode	Up to 97%
ECO mode	Up to 99%
ECOnversion mode	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	40–70 Hz
Input power factor	IEC power factor: >0.99 @ load >25%, >0.95 @ load > 15%
Maximum short-circuit rating	65 kA
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	50/60 Hz +-0.1% free running
Overload	1 min @ 150%; 10 min @ 125%
Output THDU on linear load	<1%
Battery type	VRLA, Lithium-ion
Nominal battery voltage, UPS for external batteries	480–576 V (at ratings 50 kW, 100 kW, 150 kW); 60 kW: 432–576; 384–576 V (at other ratings, including 60 kW and 120 kW)
Nominal battery voltage, UPS with internal batteries	480 VDC
Charging power	Charging power in % of output power at 0–40% load: 80%; Charging power in % of output power at 100% load: 20%
Environment	
Acoustic noise, UPS for external batteries	57 dB (70% load) / 65 dB (100% load)
Acoustic noise, UPS with internal batteries	54–65 dB, depending on load percentage and model
Dust protection	Air filter included. Conformal coated boards
Seismic	With optional kit. OSHPD tested
Environmental	Green Premium Certified, RoHS, Reach

Specifications can be subject to change.

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To learn more about the Galaxy VS UPS and EcoStruxure IT DCIM, contact your Schneider Electric representative or visit **se.com/gvs**

About Schneider Electric: At Schneider Electric, we believe **access to energy and digital** is a basic human right. We empower all to **make the most of their energy and resources**, ensuring **Life Is On** everywhere, for everyone, at every moment. We provide **energy and automation digital** solutions for **efficiency and sustainability**. We combine world-leading energy technologies, real-time automation, software and services into integrated solutions for Homes, Buildings, Data Centers, Infrastructure, and Industries. We are committed to unleash the infinite possibilities of an **open, global, innovative community** that is passionate about our **Meaningful Purpose, Inclusive and Empowered** values.
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