Galaxy VS



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

10-150 kW

*TOTAL*POWER*SOLUTIONS*

...total peace of mind

schneider-electric.com/gvs

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Maximise your availability; minimise your total cost of ownership

Galaxy VS is a highly efficient, modular, easy-to-deploy 10-150 kW three-phase uninterruptible power supply (UPS) 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 maximises your availability while minimizing your total cost of ownership, with highly efficient patented technologies and modular architecture.

Battery flexibility is one of the main highlights of Galaxy VS. When you choose lithium-ion batteries, 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™ Ready to give you visibility into the health of your UPS and 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.

Battery flexibility, including Lithium-ion batteries*

Increase availability with compact, intelligent energy storage.

99% efficient in patented ECOnversion™ mode

Recover your initial investment within two-three years through energy savings.**

Maximum availability thanks to modular architecture

Critical system components built as modules for faster serviceability and fault tolerance.

EcoStruxure IT

Anytime, anywhere monitoring and service support via smartphone app*.

** Contact your local representative for availability.*
*** Model dependent*



Well suited for a wide range of applications

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

Green Premium™

Green Premium Certified

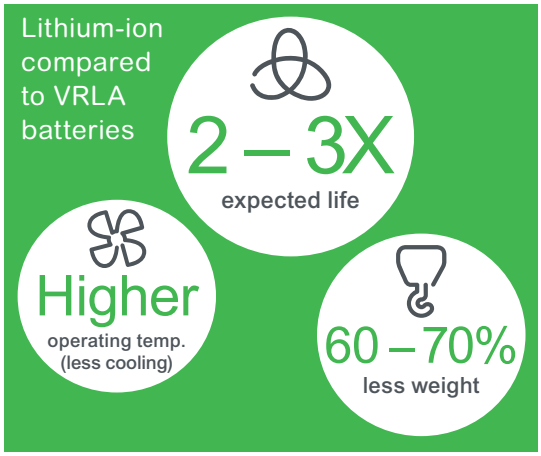
Sustainable business performance, by design. Learn more: se.com/en/work/support/green-premium/

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
- 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
- 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**

The best energy storage performance

- Faster battery charging capabilities restore back-up time 2 – 3 times faster compared to industry standards
- High predictability and manageability thanks to the built-in battery monitoring system

Choose the battery solution with the benefits that meet your site needs

Lithium-ion battery*:

- Protect your load even during repeated power interruptions
- Longer lifetime than classic battery solutions

Smart battery modules:

- Integrate batteries in the UPS to reduce footprint.
- Battery monitoring included
- Improve availability when you install additional modular battery strings
- Easily increase runtime by installing self-configuring smart battery modules

Classic batteries:

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

** Contact your local representative for availability.*
*** For Galaxy VS 120 kW and 150 kW, check with your local representative for the latest EMC Level status.*

Best operational efficiency

Reduce your energy bill

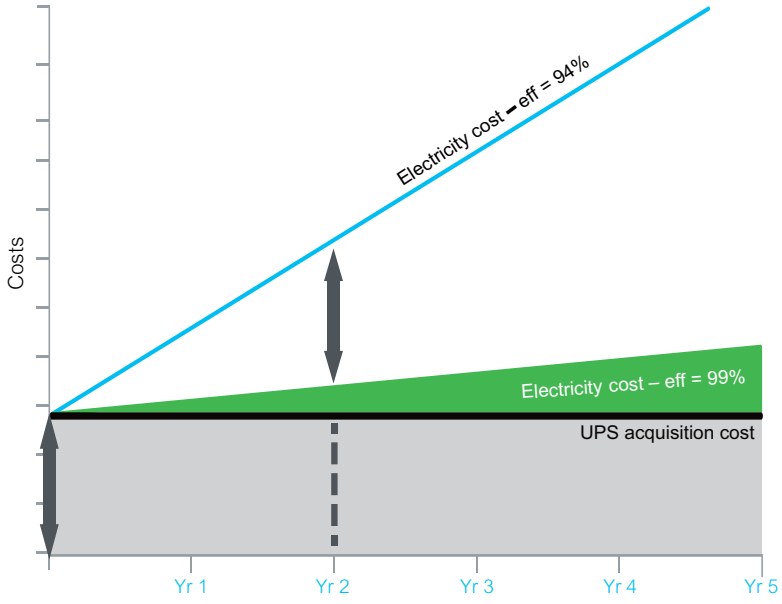
Very high efficiency for small to medium data centers, buildings, and facilities. By using ECOnversion mode, significant savings are achieved every year on your electricity bill. Compared to a legacy design, the savings are equivalent to the UPS acquisition costs after two-three years.

ECOnversion: an unbeatable combination of power quality and high efficiency

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

Comparison at 100 kW

After two-three years**, electricity savings = UPS acquisition costs

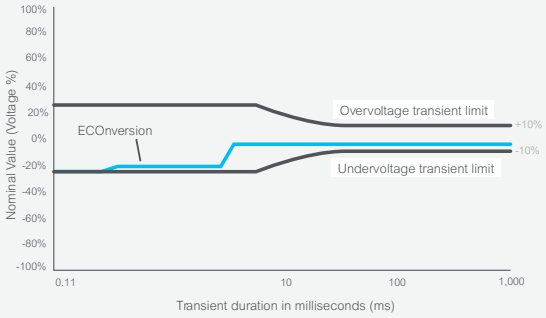


** Model dependent

ECOnversion 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



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

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: 0,12$/kW.h*
The annual electricity savings are done in comparison with a 94% efficiency standard UPS.
Calculate your efficiency savings using the Three Phase UPS Efficiency Comparison Calculator: schneider-electric.com/upsefficiencycalculator

Meets your needs in multiple environments



Galaxy VS UPS for external batteries

20-150 kW: 400V
Height: 1.5 m
Width: 0.5 m
Connection type: Front
Cable entry: Bottom and rear
Batteries: External. Compatible with Lithium-ion and VRLA batteries.
IP (Ingress Protection) level: IP21
Cabling: Copper or aluminum
Special features: Lithium-ion battery compatibility. Large cabling section provides convenient access, connection and installation.



Galaxy VS UPS with up to 2 internal smart modular battery strings

10-20 kW: 400V
Height: 1.5 m
Width: 0.33 m
Cable entry: Rear (top/bottom)
Batteries: Internal 7Ah smart battery modules (VRLA)
IP level: IP20
Cabling: Copper
Special features: Internal smart modular batteries



Galaxy VS UPS with up to 4 internal smart modular battery strings

10-50 kW: 400V
Height: 1.5 m
Width: 0.5 m
Cable entry: Rear (top/bottom)
Batteries: Internal 9Ah smart battery modules (VRLA)
IP level: IP20
Cabling: Copper
Special features: Internal modular batteries. Compatible with external modular battery cabinets.



Faster installation and serviceability



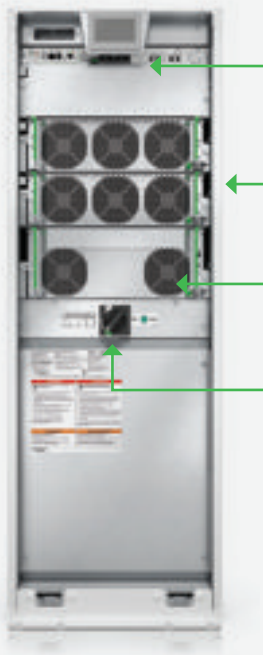
Quick to install and fits everywhere thanks to its compact design

- 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
- Reduced risk of installation error
- Precise and reliable battery configuration, thanks to predefined battery parameters
- Set up a parallel redundant configuration using the built-in internal maintenance breaker or 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, battery, and intelligence modules
- Full front access for simple and fast connection and services (Galaxy VS for external batteries)
- Reduces risk of human error; the easy and intuitive guided bypass transfer sequence on the display helps you easily transfer to and from maintenance bypass and monitors the system breaker status



Galaxy VS for external batteries

Intelligence module

"System brain" contains critical control and signal wire interfaces

Power modules

Fast-swap, slide in / slide out modules with rear connector. Includes fan box for simple replacement. Superb core performances (PF=1, high-density, high-efficiency) and fault-tolerant design

Static switch module

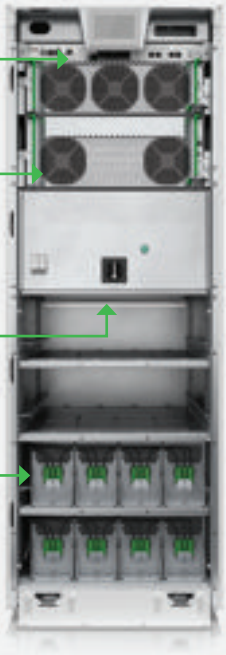
With its modular design, it can be replaced without installing an external bypass solution

Internal maintenance breaker

Simplifies service operations

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 with internal batteries

Visibility and **total peace of mind**

Manage and monitor your Galaxy VS from anywhere, at any time, on any device, thanks to EcoStruxure IT software and services.

EcoStruxure leverages advancements in IoT, mobility, sensing, cloud, analytics and cybersecurity to deliver Innovation at Every Level. This includes Connected Products, Edge Control, and Apps, Analytics & Services. EcoStruxure IT Expert and EcoStruxure Asset Advisor are cloud-based solutions at the Edge Control, and Apps, Analytics & Services level and provide you with data-driven insights to optimize data center resiliency and performance.

When it comes to IT critical equipment monitoring, are you more hands-on or hands-off?



Visibility anywhere, anytime

EcoStruxure IT Expert provides you a hands-on approach with secure, cloud-based monitoring software that synthesizes performance and alert data into proactive recommendations and enables secure, wherever-you-go visibility from any device. Try it for free for 30 days: ecostruxureit.com/ecostruxure-it-expert/#trial

** Contact your local representative for availability.*



24/7 remote monitoring and troubleshooting

EcoStruxure Asset Advisor* for secure power and cooling, provides you a hands-off approach with 24/7 remote monitoring service by the Schneider Electric service bureau engineers. We monitor and troubleshoot, you relax.

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.

Options and accessories

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



Lithium-ion batteries*



Classic battery cabinet



Modular battery cabinet



Battery breaker box



Maintenance bypass panel



Parallel maintenance bypass panels

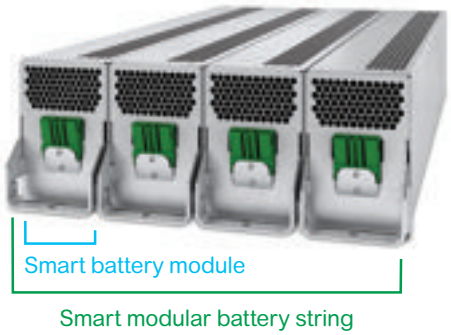
Accessories

- Seismic kit
- Air filter kit
- Parallel communications kit
- IP22 kit
- Battery breaker kit



** Contact your local representative for availability.*

Improved availability with modular batteries



Accurate anytime replacement

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

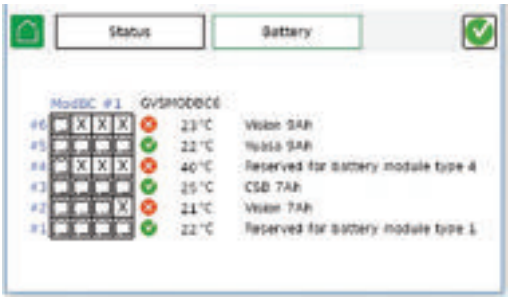
Modular Battery Cabinet for up to 6 smart modular battery strings*



Flexible, high-density energy storage

- **Right-sizing:** Add more strings for additional runtime
- **High density:** No need for service clearance between battery rows





Improved availability

- **Increased availability:** 4 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
- **Fast 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:** 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

Technical specifications

Galaxy VS	Features
Topology	On-line double conversion
Nominal power (kW)	10-150 kW (parallel up to 450 [3 UPSs in parallel] 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	Network management card included with ethernet (SNMP) and Modbus 8 dry contacts (4 inputs, 4 outputs)
Maintenance bypass	Internal maintenance breaker Optional maintenance bypass panel
Parallel capability	Simplified parallel (1+1 for redundancy); Up to 3 UPSs for capacity or 3+1 UPSs for redundancy
Efficiency	
Double conversion mode	Yes, up to 97%
ECO mode	Yes, up to 99%
ECOnversion 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	40-70 Hz
Input 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%; 10min @ 125%
Output THDU on linear load	<1%
Battery type	VRLA, Li-ion
Nominal DC Bus	480 – 576 V (at ratings 50 kW, 100 kW, 150 kW); 60 kW: 432 – 576; 384 – 576 V (at other ratings, including 60kW and 120kW)
Charging power	Charging power in % of output power at 0 – 40% load: 80% Charging power in % of output power at 100% load: 20% At 380 V only 15% for 50 kW, 100 kW, 150 kW.
Environment	
Acoustic noise	57 dB (70% load) / 65 dB (100% load)
Dust protection	Air filter included. Conformal coating
Seismic	With optional kit. OSHPD tested

Preliminary specifications – can be subject to changes.

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TOTAL POWER SOLUTIONS

To learn more about the Galaxy VS UPS, EcoStruxure IT cloud-based DCIM, and EcoStruxure Asset Advisor 24x7 Digital Monitoring Services, contact total power solutions or visit www.totalpowersolutions.ie

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. www.se.com

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