

Life Is On Schneider

Maximize your availability; minimize your total cost of ownership

Galaxy VS is a highly efficient, modular, easy-to-deploy 20 - 100 kW (480 V) / 10-50 kW (208 V) 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 maximizes 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 twothree 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*.

^{**} 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 (UL 924 and CSA 22.2 NO. 141-15)



Green Premium Certified

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

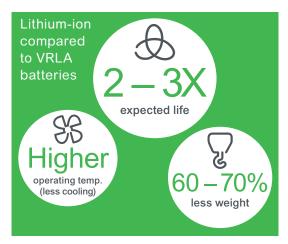
^{*} Contact your local representative for availability.

Leading performance

Robust and flexible design ideal for demanding environments at maximum performance







^{*} Contact your local representative for availability.

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
 - Supports 3- or 4-wire installations*
- 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 smart 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

Best operational efficiency

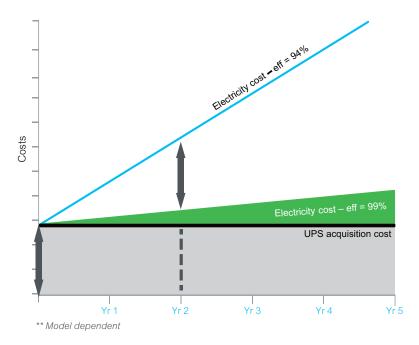
Reduce your energy bill

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%	\$5,242		
Double conversion	97%	\$3,145		
Legacy design	94%	\$0		
Comparison at 100 kW				

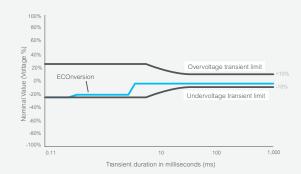
After two-three years**, electricity savings = UPS acquisition costs



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

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

^{*} Based on a market electricity price: 0,12\$/kW.h

Meets your needs in multiple environments



Galaxy VS UPS for external batteries

10-50 kW: 208 V 20-100 kW: 480 V Height: 59 in Width: 20.5 in

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 kW: 208 V 20 kW: 480 V Height: 59 in Width: 13 in

Cable entry: Rear (top/bottom)
Batteries: Internal 7Ah smart battery

modules (VRLA)
IP level: IP20
Cabling: Copper

Special features: Internal smart

battery modules



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

10-25 kW: 208 V 20-50 kW: 480 V Height: 59 in Width: 20.5 in

Cable entry: Rear (top/bottom)
Batteries: Internal 9Ah smart battery

modules (VRLA)
IP level: IP20
Cabling: Copper

Special features: Internal smart battery modules. Compatible with external modular battery cabinets.



Faster installation and serviceability

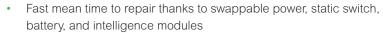




Quick to install and fits everywhere thanks to its compact design

- 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
- 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
- Supports installation with NEMA 2-hole lugs





- Full front access for simple and fast connection and service (Galaxy VS for external batteries)
- Reduces risk of human error; 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



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

Fast-swap, slide in / slide out modules with rear connector. Includes fan box for simple replacement. Replaceable without installing an external maintenance bypass solution.

Internal maintenance breaker

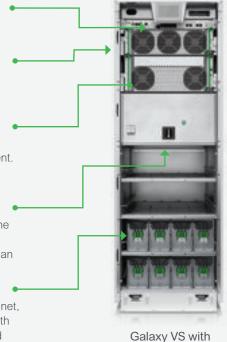
Simplifies service operations. With this breaker, the intelligence modules, power modules, and static switch module can be replaced without installing an external bypass solution.

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



Visibility and 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

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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



Maintenance bypass cabinet



Wall mount maintenance bypass panel



Maintenance bypass cabinet with transformer

Accessories

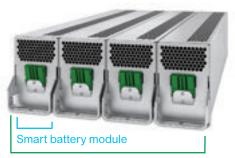
- Seismic kit
- Air filter kit
- · Parallel communications kit
- NEMA 2-holes kit**
- Kirk key



^{*} Contact your local representative for availability.

^{**} Galaxy VS UPS for external batteries only

Improved availability with modular batteries



Smart modular battery string

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

Right-sizing: Add more strings for additional runtime

Flexible, high-density energy storage

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	480 V	208 V	
Topology	On-line double conversion		
Nominal power (kW)	20 - 100 kW (parallel up to 300 kW)	10 - 50 kW (parallel up to 150 kW)	
Key features			
Modular elements	Power modules, static switch module, smart battery modules, 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/cabinet		
Parallel capability	Simplified 1+1 parallel (for redundancy); Up to 3	UPSs for capacity or 3+1 UPSs for redundancy	
Efficiency			
Double conversion mode	Up to 97%	Up to 95.5%	
ECO mode	Up to 99%		
ECOnversion mode	Up to 99%		
Input			
Nominal input voltage	200/208/220 V, 480 V, 600 V (with maintenence bypass cabinet with transformer)		
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 for load greater than 50% 0.95 for load greater than 25%		
Maximum short-circuit rating	65 kA		
Backfeed protection	Included		
Output			
Nominal output voltages	200/208/220 V, 480 V, 600 V (with transformer cabinet)		
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%	<2%	
Battery type	VRLA, Li-ion		
Nominal DC Bus	480 - 576 V (at ratings 50 kW, 100 kW) 384 - 576 V (at other ratings)	384 - 480 V	
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	54 dB (70% load) / 61 dB (100% load)	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.



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 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. www.se.com

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