Galaxy VS

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

10-150 kW
380 / 400 / 415 V



*TOTAL*POWER*SOLUTIONS*
...total peace of mind

Life Is On Schneider Electric

Maximize your availability; minimize your total cost of ownership

Galaxy VS is a highly efficient, modular, easy-to-deploy 10-150 kW (400 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. 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 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. Optimised 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*

Increase availability and reduce TCO with long-life, 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. N+1 redundancy and scalability options available.

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

Green Premium™

Green Premium Certified

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

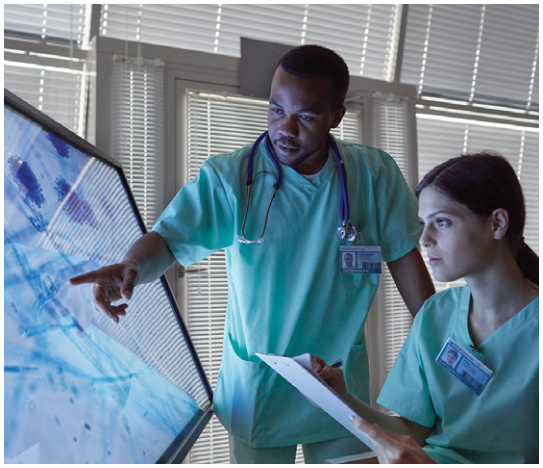
Leading performance

Robust and flexible design ideal for demanding environments at maximum performance



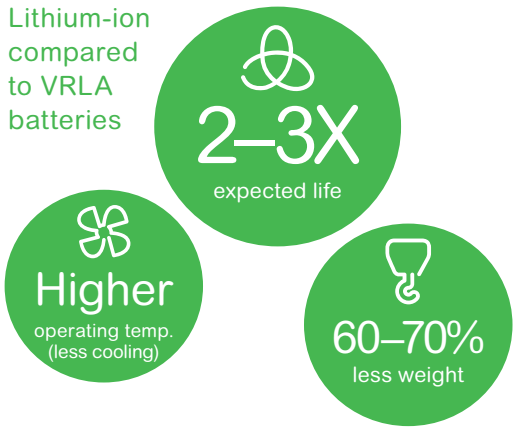
Flexibility and performance

- 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
  - 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 ºC 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
- Faster battery charging capabilities restore back-up time 2–3 times faster compared to industry standards



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

** Contact your local representative for availability.*

Best operational efficiency

Reduce your energy bill

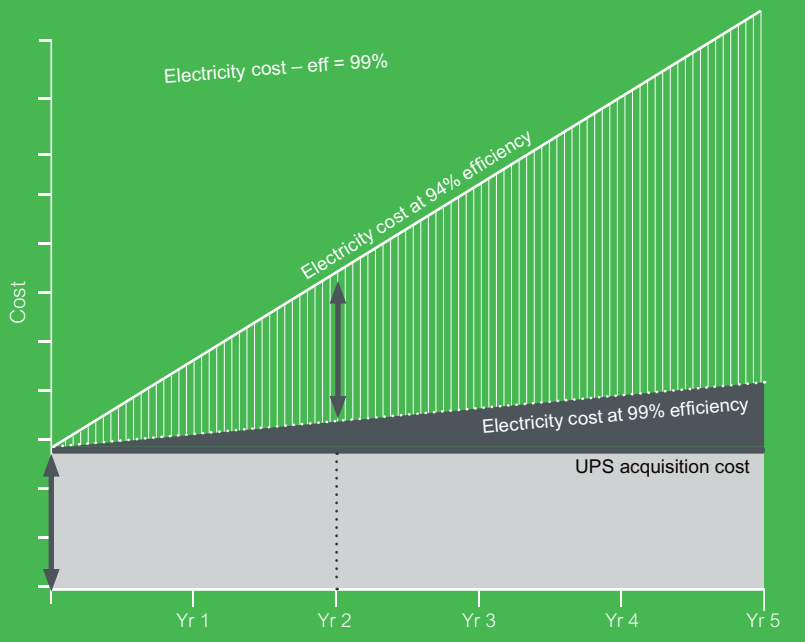
Very high efficiency for small to medium data centers, buildings, and facilities. By using ECOnversion mode, significant savings are achieved every year on your electricity bill. Compared to a legacy design, the savings are equivalent to the UPS acquisition cost after two-three years.

ECOnversion: an unbeatable combination of power quality and high efficiency

	Efficiency	Annual electricity savings*
ECOnversion	99%	€4,600
Double conversion	97%	€2,760
Legacy design	94%	€0

Comparison at 100 kW

Typically after two years**, electricity savings = UPS acquisition cost

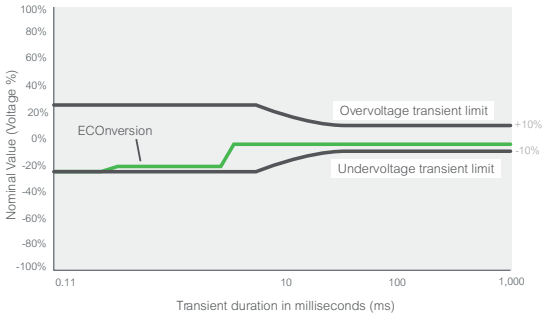


** Model dependent*

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: €0.11/kWh*
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

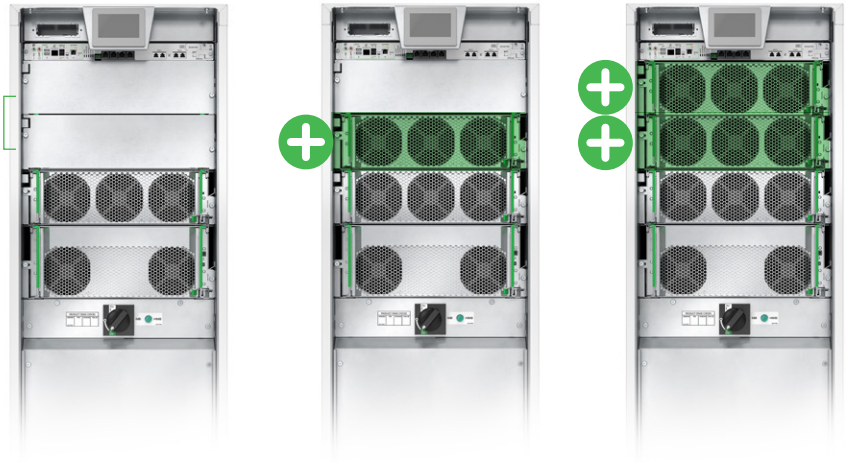
Meets your needs in multiple environments



	Galaxy VS 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 option)	IP20	IP20	IP20
Special features:	Large cabling section provides convenient access, connection and installation.		Compatible with external modular battery cabinets (up to 6 battery strings).	Compatible with external modular battery cabinets (up to 9 battery strings).

Key benefits of scalability

- Right size your protection vs. real power as the load requirements evolve over time
- Add 50 kW and 20 kW power modules, combined as needed
- Galaxy VS UPS self-detects the addition of a new power module and automatically updates its configuration settings



** 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

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; 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, fast-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**
   Fast-swap, slide in / slide out modules with rear connectors. Includes fan box for simple replacement. Replaceable without installing an external maintenance bypass solution
5. **Internal maintenance bypass**
   Simplifies service operations. With this design, the intelligence modules, power modules, and static switch modules can be replaced without installing an external maintenance bypass solution
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

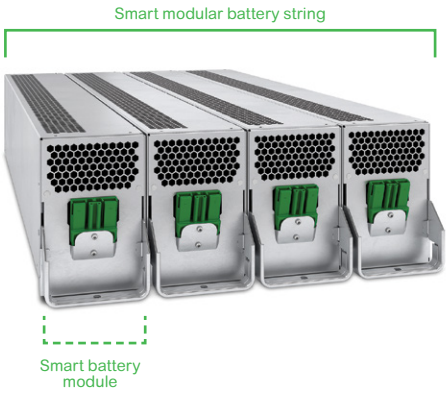


Galaxy VS for external batteries



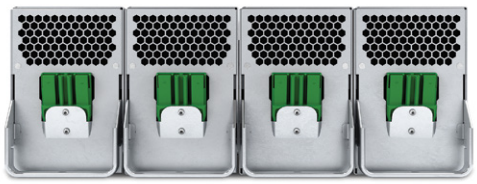
Galaxy VS with internal batteries

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



Improved availability

- **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

Modular battery cabinets

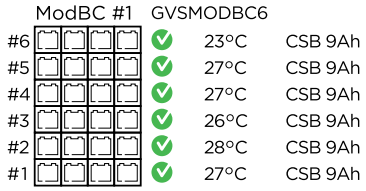

Up to 6 smart modular battery strings


Up to 9 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





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

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. EcoStruxure IT Expert and EcoStruxure Asset Advisor are cloud-based solutions that 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



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 Connected Services Hub experts. We monitor and troubleshoot, you relax.

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.

** Contact your local representative for availability.*

Options and accessories

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

Batteries



Lithium-ion batteries*



Classic battery cabinets



Battery breaker box



Modular battery cabinets

Maintenance bypasses



Wall Mount Maintenance bypass panel



Parallel maintenance bypass panels

Accessories

- Seismic kit
- Air filter kit
- Parallel communications kit
- IP22 kit
- Battery breaker kit
- Smart modular battery string
- Smart modular high capacity battery string
- Smart long-life high capacity battery string



** Contact your local representative for availability.*

Technical specifications

Galaxy VS	400 V
Topology	On-line double conversion
Nominal power (kW)	10-150 kW (parallel up to 450 kW) [3 UPSs in parallel]
Key features	
Scalability option	50-150 kW
N+1 redundancy option	20-50 kW N+1
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 bypass. Optional maintenance bypass panel
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%
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, Li-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 60kW and 120kW)
Nominal battery voltage, UPS with internal batteries	480 V DC
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

Preliminary specifications – can be subject to changes.

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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**

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