Galaxy VS

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

10-150 kW
380 / 400 / 415 V

schneider-electric.com/gvs
Maximize your availability; minimize 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 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.

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

99% efficient in patented ECOndversion™ 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*.

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 ECOntversion 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.

ECOntversion: an unbeatable combination of power quality and high efficiency

<table>
<thead>
<tr>
<th></th>
<th>Efficiency</th>
<th>Annual electricity savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECOntversion</td>
<td>99%</td>
<td>€4600</td>
</tr>
<tr>
<td>Double conversion</td>
<td>97%</td>
<td>€2760</td>
</tr>
<tr>
<td>Legacy design</td>
<td>94%</td>
<td>€0</td>
</tr>
</tbody>
</table>

Comparison at 100 kW

ECOntversion 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: 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

Galaxy VS ECOntversion meets Class 1 of IEC 62040-3: zero-break transfer during power outage.
### Galaxy VS UPS for external batteries

**Galaxy VS UPS**

- **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

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
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

* 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.

- 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

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
## Galaxy VS Features

<table>
<thead>
<tr>
<th>Galaxy VS</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topology</td>
<td>On-line double conversion</td>
</tr>
<tr>
<td>Nominal power (kW)</td>
<td>10-150 kW (parallel up to 450 [3 UPSs in parallel] kW)</td>
</tr>
</tbody>
</table>

### 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.*
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](http://www.se.com)