Schneider Electric – Galaxy VS

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

20 – 100 kW (480 V)
10 – 50 kW (208 V)

se.com/ups
Increased availability. Reduced operating costs. First class power protection for critical infrastructure.

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 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.

The Galaxy VS is EcoStruxure™ Ready to give you 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

Available with Lithium-ion battery*
Long-life, compact, and reliable energy storage

99% efficient in patented ECOnterprise™ mode
Recover your initial investment within two years through energy savings

Maximum availability thanks to modular architecture
Critical system components built as modules for faster serviceability, fault tolerance, and short mean time to repair

EcoStruxure IT
Anytime, anywhere monitoring and service support via smartphone app*

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

(*) contact your local representative for availability
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*
- Faster battery charging capabilities: 2-3 times faster compared to industry standards.
- 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 and up to 50°C with load derating.
- Suited for humid environments thanks to conformal coating.
- Seismic certified (with option kit).
- Tested to withstand high input short-circuit: 65 kA.
- Exceeds industry standards on electromagnetic protection due to EMC Level C2.

Best energy storage performance with Lithium-Ion battery* options
- Restore backup time quickly.
- Protect your load even during repeated power interruptions.
- Longer lifetime than classic battery solutions.
- Higher predictability and manageability thanks to the built-in battery monitoring system.

(*) 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 costs after only two years.

ECOnversion: an unbeatable combination of power quality and high efficiency

<table>
<thead>
<tr>
<th>Efficiency</th>
<th>Annual electricity savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECOnversion</td>
<td>99% $5,242</td>
</tr>
<tr>
<td>Double conversion</td>
<td>97% $3,145</td>
</tr>
<tr>
<td>Legacy design</td>
<td>94% $0</td>
</tr>
</tbody>
</table>

Comparison at 100 kW

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

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.
Faster installation and serviceability

Simplify your installation and maintenance

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, dust filters, and eight dry contacts
- Reduced risk of installation error; the large cabling section is easy to access
- Precise and reliable battery configuration, thanks to predefined battery parameters
- Simply set up a parallel redundant configuration without the need for an external bypass panel; Galaxy VS also supports a common battery bank
- 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, bypass, and intelligence modules
- Full front access for simple and fast connection and services
- Easy to stock modular spare parts for service
- Reduces risk of human error by making the bypass transfer sequence easy and intuitive with a simplified, integrated maintenance bypass

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 Bypass
Simplifies service operations, eliminates risk of error
Peace of mind

Manage and monitor your Galaxy VS from a smartphone thanks to cloud-based software and services

Connect to EcoStruxure™ Asset Advisor, our cloud-based remote monitoring service, and optimize your time with access to our 24/7 expert Service Bureau empowered with real-time data.

Are you looking for a monitoring software solution? Learn more on EcoStruxure™ IT Expert, new to EcoStruxure family: https://ecostruxureit.com/ecostruxure-it-expert/

We troubleshoot, you relax

Remote monitoring
24/7 incident monitoring and remote troubleshooting

Mobility
Instant visibility to your Galaxy VS anytime, anywhere via free smartphone app

Recommendations
Online reports with analytics and advice to improve business continuity

Availability of services is country dependent.

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.
Adjusts to multiple environments

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

**Auxiliaries**

- Classic battery cabinet (with batteries)
- Maintenance bypass cabinet
- Maintenance bypass cabinet with transformer
- Lithium-ion batteries *

**Options**

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

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**Green Premium Certified**

Sustainable business performance, by design.
(*) contact your local representative for availability
Technical specifications

<table>
<thead>
<tr>
<th>Galaxy VS</th>
<th>480 V</th>
<th>208 V</th>
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</thead>
<tbody>
<tr>
<td>Topology</td>
<td>On-line double conversion</td>
<td></td>
</tr>
<tr>
<td>Nominal Power (kW)</td>
<td>20-300 kW</td>
<td>10-150 kW</td>
</tr>
<tr>
<td>Key features</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modular elements</td>
<td>Power modules, static bypass switch module, intelligence module</td>
<td></td>
</tr>
<tr>
<td>Display</td>
<td>Color touch screen, 4.3 inches, status LED, mimic on display</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>Communication card included with ethernet (SNMP) and modbus 8 dry contacts* (4 inputs, 4 outputs)</td>
<td></td>
</tr>
<tr>
<td>Maintenance bypass</td>
<td>Yes</td>
<td>Internal maintenance bypass</td>
</tr>
<tr>
<td>Parallel capability</td>
<td>Up to 4 UPS (3+1)</td>
<td></td>
</tr>
<tr>
<td>Efficiency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double conversion mode</td>
<td>Up to 97%</td>
<td>Up to 95.5%</td>
</tr>
<tr>
<td>ECO mode</td>
<td>Up to 99%</td>
<td></td>
</tr>
<tr>
<td>ECOconversion mode</td>
<td>Up to 99%</td>
<td></td>
</tr>
<tr>
<td>Input</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal input voltage</td>
<td>200/208/220/480V (600V with maintenance bypass cabinet with transformer)</td>
<td></td>
</tr>
<tr>
<td>Input voltage range (phase to phase)</td>
<td>+/-15%</td>
<td></td>
</tr>
<tr>
<td>Single mains/dual mains</td>
<td>Single mains as standard. Easily converted to dual mains.</td>
<td></td>
</tr>
<tr>
<td>Input frequency</td>
<td>40-70 Hz</td>
<td></td>
</tr>
<tr>
<td>Input current total harmonic distortion (THDi)*</td>
<td>20-40 kW: &lt;5% at 100% load</td>
<td>10 kW: &lt;5% at 100% load</td>
</tr>
<tr>
<td></td>
<td>50 kW: &lt;3% at 100% load</td>
<td>15-50 kW: &lt;3% at 100% load</td>
</tr>
<tr>
<td></td>
<td>60-80 kW: &lt;5% at 100% load</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100 kW: &lt;3% at 100% load</td>
<td></td>
</tr>
<tr>
<td>Input power factor</td>
<td>&gt;0.99 @ load &gt;25%, &gt;0.95 @ load &gt; 15%</td>
<td></td>
</tr>
<tr>
<td>Connections</td>
<td>Bottom by default Top (with rear cabling)</td>
<td></td>
</tr>
<tr>
<td>Cables</td>
<td>Copper or aluminum</td>
<td></td>
</tr>
<tr>
<td>Input short-circuit rating</td>
<td>65kA</td>
<td></td>
</tr>
<tr>
<td>Backfeed protection*</td>
<td>Included</td>
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</tr>
<tr>
<td>Output</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal output voltages</td>
<td>200/208/208 V, 480 V, 600 V (with transformer cabinet)</td>
<td></td>
</tr>
<tr>
<td>Load power factor*</td>
<td>PF=1 (0.7 leading to 0.7 lagging without derating)</td>
<td></td>
</tr>
<tr>
<td>Voltage regulation</td>
<td>+/- 1%</td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>50/60 Hz +0.1% free running</td>
<td></td>
</tr>
<tr>
<td>Overload</td>
<td>1 min @ 150%; 10 min @ 125%</td>
<td></td>
</tr>
<tr>
<td>Output THDU on linear load</td>
<td>&lt;1%</td>
<td>&lt;2%</td>
</tr>
<tr>
<td>Mechanical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size*</td>
<td>HxWxD: 58.46 x 20.51 x 33.35 in (1485 x 521 x 847 mm)</td>
<td></td>
</tr>
<tr>
<td>IP level (Ingress Protection)</td>
<td>IP21</td>
<td></td>
</tr>
<tr>
<td>Battery type</td>
<td>VRLA, Li-ion</td>
<td></td>
</tr>
<tr>
<td>Nominal DC Bus</td>
<td>480-576 V (at ratings 50 kW, 100 kW)</td>
<td>384-480 V</td>
</tr>
<tr>
<td></td>
<td>384-576 V (at other ratings)</td>
<td></td>
</tr>
<tr>
<td>Charging power</td>
<td>Charging power in % of output power at 0–40% load: 80%</td>
<td>Charging power in % of output power at 100% load: 20%</td>
</tr>
<tr>
<td>Environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acoustic noise*</td>
<td>54 dB (70% load) / 61 dB (100% load)</td>
<td>57 dB (70% load) / 65 dB (100% load)</td>
</tr>
<tr>
<td>Dust protection</td>
<td>Dust filter included. Conformal coating</td>
<td></td>
</tr>
<tr>
<td>Seismic</td>
<td>With optional kit. OSHPD tested</td>
<td></td>
</tr>
</tbody>
</table>

Preliminary specifications – can be subject to changes.  * Unique to Schneider
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/ups.