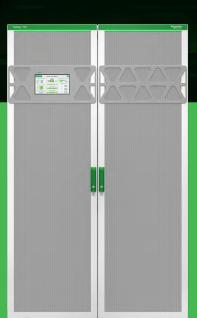


Galaxy VXL

High-density, sustainable, easy-to-deploy power protection for large and hyperscale data centers and critical infrastructures 500-1250 kW (400 V)



Life Is On Schneider

The ultra-high density backbone of the digitized world

Galaxy VXL is a highly efficient, compact, modular 500-1250 kW (400V) 3-phase uninterruptible power supply (UPS) with Live Swap. It is designed to manage AI load and deliver top performance for colocation, large and extra-large data centers, as well as critical infrastructure in commercial and industrial, and cloud and service provider facilities.

With its industry-leading compact design, high-density technology, fault-tolerant architecture, and AI load-tolerant design, Galaxy VXL maximizes availability, operational efficiency, and critical load protection while minimizing total cost of ownership. Thanks to patented technologies, this UPS delivers up to 99% efficiency in eConversion mode, the patented high-efficiency mode that delivers Class-1 power protection and reduces the UPS carbon emissions by a factor of two, and 97.5% efficiency in double conversion mode.

Scalability enables you to pay as you grow, reducing both your capital investment and total cost of ownership. Buy the power modules you need at start-up and enjoy optimized operating efficiency, then add certified Live Swap power modules as demand grows. The modular design also enables N+1 internal redundancy, which multiplies by 10 the system's availability with no extra footprint.

Galaxy VXL is compatible with Galaxy Lithium-ion batteries, third-party batteries, or classic VRLA batteries, offering flexible and predictable runtimes for critical loads.

Galaxy VXL is EcoStruxure™ connected to give you peace of mind anytime, anywhere. Start-up service is included to optimize your system's performance, quality, and safety. With its modular design and superior reliability, Galaxy VXL is the ideal backbone for your critical infrastructure.



Key advantages and innovations



Optimized efficiency with eConversion

Recover your initial investment in 2 years or less through energy savings, with up to 99% efficiency in eConversion mode and up to 97.5% efficiency in double conversion mode.



Battery flexibility, including Lithium-ion batteries

Increase availability and reduce TCO with reliable, long-life, intelligent energy storage. More than 10 years experience with Lithium-ion installations across the Schneider Electric power protection portfolio.



Maximum availability thanks to modular architecture

Scalability enables you to pay as you grow, maximizing savings on capital investment and total cost of ownership. One extra power module for N+1 internal redundancy delivers ultra-high availability.



Compact design Optimized footprint

With its ultra-high density 125 kW, 3U power modules and full-front access, Galaxy VXL is a footprint saver well-suited for confined spaces.



Innovative Live Swap

Keep your load protected, your business running, and your employees safer. Expand power and maximize uptime, availability, and power continuity by adding or swapping out power modules quickly with no scheduled downtime.



EcoStruxure IT

Monitor, manage, and model your IT infrastructure, and get service support, anytime, anywhere*.

*Contact your local representative for availability.

Powering the AI revolution with AI-tolerant UPS infrastructure

The high-density requirements of AI workloads are pressuring data center and colocation operators and hyperscalers to expand fast. As operators look for ways to meet demand, one area they must pay close attention to is the power protection infrastructure Schneider Electric leads the way in providing AI-tolerant UPSs to help safeguard multimillion-dollar AI investments.

Our Galaxy VXL UPS solution is an ideal choice for AI infrastructure thanks to:

- Proven performance: Galaxy VXL is rigorously tested for next-generation AI compute demands, ensuring they can support dramatic, rapid power load fluctuations without interruption.
- Scalability and flexibility: A modular, flexible design enables power protection infrastructure to grow alongside AI infrastructure, whether in data centers, colocation facilities, edge computing sites, or hyperscale sites.
- Efficiency and sustainability: Galaxy VXL is highly efficient and compact, enabling businesses to leverage their Al investments while remaining energy-conscious and cost-effective.

Well-suited for hyperscale IT solutions and mega factories

Information technology and data centers

- Large and extra-large data centers
- Cloud and colocation facilities
- Artificial intelligence

Industrial processes and commercial buildings

- · Semiconductor manufacturing
- Critical processes



Next-level transparency for better-informed product choices. Learn more about the Environmental Data Program at: se.com/ww/en/about-us/sustainability/environmental-data-program

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 4-wire installations
- Increase onsite reliability and reduce start-up costs by using the Smart Power Test feature (SPoT)
 - Simple, easy, and safe method to test the UPS at full power
 - Reduce risk to load and improve product quality



Higher availability: Maximum uptime, reduced risk.

- One extra power module for **N+1** internal redundancy keeps your load protected and multiplies system availability by 10 with no extra footprint
- Optimized uptime with wide input tolerance window (+/-15%)
- With Live Swap, it is simple and fast to add, replace, or remove power modules
- Parallelable for capacity (5 MW)
- Parallelable for redundancy (5 MW N+1)*
- N+0 or N+1 module-level redundancy
- N+0 or N+1 system-level redundancy



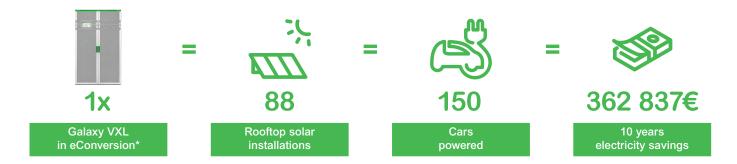
Pay as you grow

- Fast, straightforward deployment, with a high density cabinet that rolls into place quickly
- Quickly respond to increasing demand; modular, scalable architecture makes it easy to expand capacity with no footprint penalty
- Standardize site design, with easy to repeat modular architecture

^{*}Contact your local representative for availability.

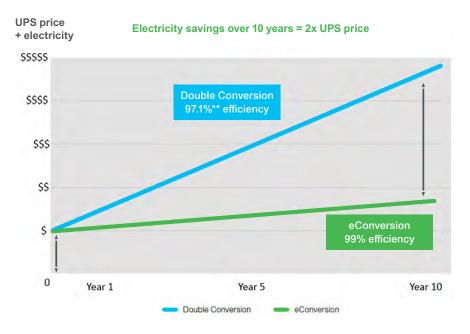
Premium protection and sustainability

eConversion: an unbeatable combination of power quality and high efficiency



Sustainably reduce your operating costs

Protect power to your load, reduce your total cost of ownership and electricity consumption, and meet your sustainability goals with up to 99% efficient, Class 1-compliant eConversion mode for Galaxy V-series UPSs, the recommended operating mode for your Galaxy V-series UPS.



- By operating at up to 99% efficiency, the electricity savings in eConversion within 10 years typically equals 2x the price of the UPS.
- The inverter operates continuously, protecting the load with no transfer time. eConversion performance has been certified with the same IEC 62040-3 Class 1 rating as double conversion mode.
- eConversion mode recharges batteries and provides power factor correction and harmonics compensation, making it a versatile solution for IT and non-IT loads.
- Since its launch in 2014, eConversion has been successfully deployed all over the world. Join thousands of customers who use it daily to protect their critical loads.

Calculate your savings

Use our eConversion vs. Double Conversion Calculator to quickly assess your potential energy savings, operating cost optimization, and CO₂ emissions reduction by comparing the cost of running your Galaxy V-Series UPS in eConversion mode vs. double conversion mode.



Scan the QR code with your phone camera, or <u>click here</u> to access the calculator from the Schneider Electric Data Center Trade Off Tools™ Web page.

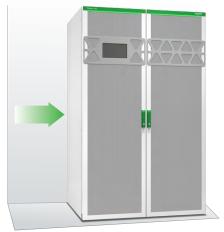
Learn more about eConversion

^{*} Example for 1250 kW at full load, electricity price at 0.15€/kWH, and electricity saving after 10 years.

^{**} Blended efficiency per PEP (Product Environmental Profile) method.

Innovative power density

Free up space for revenue-generating equipment; Galaxy VXL sets a new standard in power density, reducing your power protection footprint by up to 52% compared to industry average



Galaxy VXL 1250 kW

Galaxy VXL offers dramatic footprint savings, thanks to ultra high density design:

- Most compact cabinet footprint at only 1.2m²
- 3U, 125 kW power module
- Power density up to 1042 kW/m²
- · Front service access
- No shadow footprint
- · Well-suited for confined spaces
- Up to 52% smaller than the industry average

For a typical 12.5 MW data center operating in a 2N architecture, this means a significant saving of 26m² in floor area compared to the competition, offering potential cost savings of up to a quarter of a million dollars in infrastructure costs.

Save space and the environment

Galaxy Lithium-ion Battery Cabinets achieve total space savings of up to 70% compared with VRLA battery solutions. Pair your Galaxy VXL UPS with Galaxy Lithium-ion Battery Cabinets to achieve the most compact, high-density footprint in the market.

As a first mover with a vast installed base, Schneider Electric has developed its own Galaxy Lithium-ion battery solution that also delivers these benefits:

- · Optimize TCO and achieve sustainability targets by doubling your battery life
- Recharge 2-3x faster than VRLA solutions
- · Simplify and speed up installation with our internal power supply
- Enhance battery safety with three levels of battery management system (BMS)

Galaxy VXL is available with a full range of options and accessories that ensure the best performance in any environment, including Calaxy Lithium in and alegain VRLA betteries to most any site requirement.

including Galaxy Lithium-ion and classic VRLA batteries to meet any site requirement.

Lithium-ion compared to VRLA batteries













Future-proof your data center

Expand power with no scheduled downtime and no extra footprint with Live Swap

Galaxy VXL's modular and scalable design supports the Live Swap of power modules, optimizes your up-front capital investment, provides you with power continuity, and gives you more flexibility to expand power and pay as you grow.

Predict your investment over time with modular, scalable design

Right-size your power protection and redundancy from day one. This maximizes your operating efficiency and sustainably minimizes your energy consumption, optimizing your TCO.

Scale fast with no scheduled downtime, and keep your employees safer

Modular design and Live Swap make just-in-time data center expansion effortless, with no scheduled downtime, enhancing business continuity.

With Live Swap, it is simple and fast to add, replace, or remove power modules while the Galaxy VXL UPS is online and fully operational, increasing protection for your employees.

Galaxy VXL's innovative design supports TÜV verified Live Swap: the new frontier for modularity, scalability, and employee protection

Galaxy VXL with Live Swap is a pioneering innovation, driven by Schneider Electric's strong safety culture, delivering a touch-safe design through the entire process of adding or replacing the power modules in the Galaxy VXL, while the UPS is online.

This innovative capability enables fast and simple insertion and replacement of the power modules in the Galaxy VXL 500-1250 kW UPS, while the UPS is online and fully operational, without having to transfer the UPS to maintenance bypass or to battery operation and with increased protection for your employees.

Galaxy VXL has been designed to reduce the risk of shock and potential arc flash during the insertion or removal of power modules, as well as to ensure touch safety throughout the entire Live Swap operation. In practical terms, the power modules can be added or replaced while the Galaxy VXL is online, and the energy incident levels are kept below 1.2 cal/cm².

The numerous and rigorous tests completed have been witnessed and verified by a recognized third-party laboratory.

Scale and pay as you grow

Scale power instantly in 125 kW increments from 500 kW to 1250 kW, as your power requirements evolve.

Galaxy VXL has been engineered to ensure touch safety and to mitigate risks of arc flash and shock:

Galaxy VXL with Live Swap is Schneider Electric's response to national and local electrical safe work practices regulations. For more information, you can read WP-13, Mitigating Electrical Risk While Swapping Energized Equipment.



Visibility and peace of mind

Secure Network Management Card System

Introducing the Secure NMC System.

Our Secure NMC System (SNS) protects your business by ensuring your connected devices are secure from unknown threats, compliant with changing regulations, and resilient for the entirety of your hardware's life.

Activate your included subscription.

A Secure NMC subscription is required to upgrade the firmware of the Network Management Card (NMC). The Galaxy VXL NMC includes a 1-Year Secure NMC Subscription which is activated at time of installation by your Schneider Electric service expert.

Updating your NMC firmware matters



Monitoring and alarming Remote monitoring

and visibility across IT infrastructure is mission critical, because it reduces the risk of unexpected issues and downtime.



Wherever-you-go visibility

The Schneider Electric
Network Management Card
enables essential and secure
remote monitoring and
management of your
Galaxy VXL.



Preventative management

Connecting your devices will improve the availability, resiliency, and efficiency of your power infrastructure systems and the IT workloads they support.





Ongoing security compliance

More and more cybersecurity breaches are linked to neglected firmware. Our new Secure NMC System will help you:

- Reduce exposure to attack and minimize downtime—protect your connected devices with the latest security updates.
- Achieve consistent compliance—protect your business with the only NMC firmware independently certified to the highest cybersecurity compliance level (IEC 62443-4-2).
- · Never become out of date—stay ahead and easily manage and deploy firmware updates.

Learn more at https://www.se.com/ww/en/product-range/61936



EcoStruxure IT enables resilient, secure, and sustainable data centers and IT environments

Schneider Electric's comprehensive Data Center Infrastructure Management (DCIM) solution, EcoStruxure IT, ensures business continuity by enabling secure monitoring, management, insights, planning, and modeling—whether from a single IT rack to hyper-scale IT—on-premises, in the cloud, and at the edge.

Easy visibility

Monitoring and management software streamlines data center device management:



EcoStruxure IT Expert provides you a hands-on approach with cloud-based monitoring software that synthesizes and analyzes performance and alert data into proactive recommendations and enables wherever-you-go visibility from any device.

Try it now: https://community.se.com/t5/Get-started-with-EcoStruxure-IT/Ta-p/447135



EcoStruxure Data Center Expert is a scalable end-to-end on-premise monitoring software that collects, organizes, and distributes critical device information, providing a comprehensive view of your company-wide, multi-vendor physical infrastructure.

Operations, optimized

Planning and modeling software transforms data into performance insights:



EcoStruxure IT Advisor is a data center infrastructure planning and modeling solution that provides Data Center Managers in large enterprises and colocation data centers with full insights into their infrastructure to improve profitability, sustainability, and resiliency.

Improved uptime with the right service plan

EcoCare membership, a next-generation service plan from day one

An innovative product needs an innovative service. EcoCare membership is a service plan that helps keep UPSs up and running through advanced analytics and AI models combined with priority access to technical experts.

How does it work?

Critical UPS data points such as aging profile and temperature of key components are analyzed within our EcoStruxure IoT platform, monitored 24/7 by our Connected Services Hub, delivering key benefits such as:





Less on-site interventions



Priority access to support



Optimized lifespan and budget management





Less on-site interventions

We monitor remotely each asset and component condition, helping **reduce on-site activities by up to 50%** with our Maintenance Index. On-site activities previously scheduled every year can now be delayed from 1 up to 2 years, by shifting from calendar **to condition-based maintenance**. This helps **improve uptime** and reduce costs and disruption, freeing up your skilled personnel to focus on higher-value tasks.

Exclusive support in case of emergency

EcoCare members get the right support at the right time with:

- **24/7 remote monitoring and alarming** from our Connected Services Hub, allowing us to proactively identify and address any anomalies before they disrupt your operations.
- **Premium access to technical experts**, on-site and remotely, along with Customer Success Managers and preferred SLAs, helping to reduce Mean Time to Repair (MTTR).
- Access to **training resources** designed to empower your team to troubleshoot in case of anomalies, as well as exclusive member rates on spare parts.

Optimized lifespan and budget management

We provide continuous insight into the overall health of the equipment by providing the remaining useful life for each individual critical component of your UPS with our Health Index, reducing the need for premature replacements and associated capital expenditures, and avoiding carbon footprint.

Our services

- 6000+ in-house electrical experts and a large ecosystem of certified partners in 140 countries
- 15+ Connected Services Hubs worldwide to provide valuable data-driven insights

^{*} EcoCare for 3-Phase UPS is being progressively launched; contact your Schneider Electric representative for availability

Technical specifications

Galaxy VXL	Specifications
Nominal power rating	F00 00F 7F0 07F 4000 1105 1050
(kVA = kW)	500, 625, 750, 875, 1000, 1125, 1250
Scalability	From 500 kW to 1250 kW with 125 kW power module increments
N+1 power ratings	Up to 1125 kW N+1
Technical rating	500, 600, 625, 750, 875, 1000, 1125, 1250 kW
Topology	On-line double conversion, TÜV-verified eConversion
Key features	
Modular design	Power module, static switch, power supply unit
Third-party verified Live Swap	Power module, HMI
Display	10-inch color touch display, mimic diagram on display
Cabinet Type	Standalone, White (RAL9003)
Soft start, walk-in charger for compatibility with gensets	Yes Adaptative, Programmable 1-300sec
Cold start function (start without mains)	Yes (by default)
Genset Mode	Yes (input dry contact of genset)
Emergency stop (EPO)	Yes. Dry contact
Smart Power Test (SPoT)	Yes
Efficiency	
Double conversion mode	Up to 97.5%
eConverison mode	Up to 99%
ECO mode	Up to 99%
Paralleling	
Parallel capability	Parallelable for capacity (5 MW) or redundancy (5 MW N+1)*
Batteries	
Battery type	VRLA/Lithium-ion
DC Bus/Number of VRLA battery blocks	480V-576V / 40 - 48 blocks
Maximum charging power (400V and 415V)	At 0-80% load: 40% At 80-100% load: 40% to 20% At 100% load: 20%
Breaker trip function	Yes with 4 sets of dry contacts
Environment	
Operating temperature	0 to 40 °C without derating
Storage temperature	-25 to 55 °C (-13 to 131 °F)
Operating Humidity	5 to 90%, noncondensing
Storage Humidity	0 to 95%, noncondensing
Elevation/altitude	1000m 100% load up to 3000m with derating
Audible noise at 100% load	<69 dB at 70% load <78 dB at 100% load
IP level (Ingress Protection)	IP20
Conformance coating	On PCBA
Dimensions	
500-1250 kW UPS (WxDxH)	1200 x 1000 x 1970 mm
	500 kW UPS: 859kg (1894 lb)
Weight	1250 kW UPS: 1183kg (2608 lb)
Installation	Free-standing; Up against a wall without clearance; Back to back; Side to side

Galaxy VXL	Specifications
Input	
Rated voltage	380/400/415 V
Input voltage range (phase to phase)	-/+ 15%
Input frequency	40-70Hz
Single mains/dual mains	Single mains as standard. Easily converted to dual mains.
Input current total harmonic distortion (THDI)	<3% at full linear load (symmetrical)
Input power factor	>0.99 at load >25%
Neutral	4-wire: 3 phases + Neutral + Ground
Cable entry	Top as standard.
Input backfeed protection	Input backfeed protection: Built-in backfeed relay and fuses Bypass backfeed protection: Upstream installation of breaker with shunt trip connected to the UPS
Maximum short-circuit rating	100 kA lcw
Output	
Nominal output voltages	380/400/415 V
Load power factor	PF=1 @ 40 °C (104 °F) without derating 0.5 leading to 0.5 lagging without derating
Voltage regulation	+/- 1% (symmetrical load) +/- 3% (asymmetrical load)
Frequency	50/60Hz +/- 0.1% free running
Overload normal operation	<=125% for 10 mins <=150% for 1 min <=112% continuous
Overload battery operation	<=110% for 1 min
Overload in Bypass Mode	<=110% for continuous <=125% for 10 mins <=150% for 1 min
Output THDU on linear load	1%
Output THDU on non-linear load	5%
Max load crest factor	3
Elevation/altitude	1000m 100% load up to 3000m with derating
Audible noise at 100% load	<69dBA at 70% load <78dBA at 100% load
IP level (Ingress Protection)	IP20
Conformance coating	On PCBA

Options and accessories	
Lithium-ion battery cabinet	Network Management Card with subscription*
Empty VRLA battery cabinet	Air filter kit
Battery breaker box	Seismic kit
Battery breaker kit	Additional temperature sensor for NMC
Parallel communications kit	Remote centralized display

Product specifications are subject to change without notice.

^{*}Contact your local representative for availability.

 $[\]hbox{\ensuremath{^{**}}$Contact your sales representative for any custom-built requirements}.}$



To learn more about the Galaxy VXL UPS and EcoStruxure IT, contact your Schneider Electric representative or visit se.com/ups

About Schneider Electric

Schneider's purpose is to create Impact by empowering all to make the most of our energy and resources, bridging progress and sustainability for all. At Schneider, we call this Life Is On.

Our mission is to be the trusted partner in Sustainability and Efficiency.

We are a global industrial technology leader bringing world-leading expertise in electrification, automation and digitization to smart industries, resilient infrastructure, future-proof data centers, intelligent buildings, and intuitive homes. Anchored by our deep domain expertise, we provide integrated end-to-end lifecycle AI enabled Industrial IoT solutions with connected products, automation, software and services, delivering digital twins to enable profitable growth for our customers.

We are a people company with an ecosystem of 150,000 colleagues and more than a million partners operating in over 100 countries to ensure proximity to our customers and stakeholders. We embrace diversity and inclusion in everything we do, guided by our meaningful purpose of a sustainable future for all.

www.se.com

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