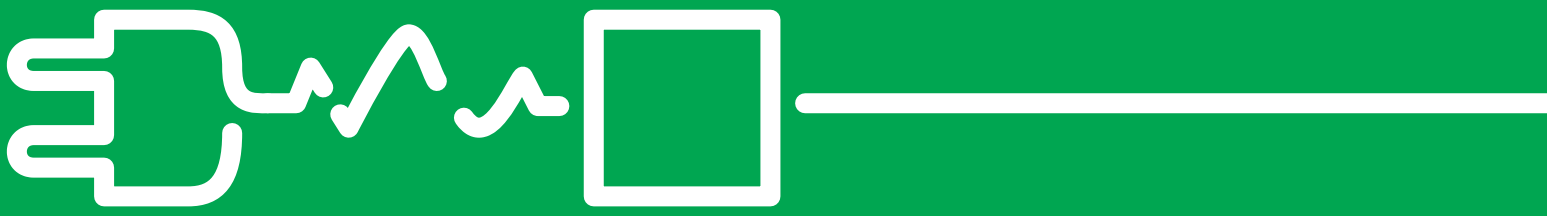
Secure Power Solution international guide 2012 - 2013



Schneider Electric

Why use a Secure Power Solution?

Problems relating to the quality and availability of electrical power are more and more crucial due to the key role of communications and electronics in many critical applications.

In sensitive industrial sectors such as Marine and Offshore, Airports and Transportation, Healthcare and Pharmaceutical... any lack of electrical power can engender serious danger and put human life at risk.

Secure powered systems are now an integral part of the value chain to meet growing needs for high-quality and high-availability power.

They are the best guarantee for:
- Your operational service continuity
- Your productivity
- The quality of your products and services
- Your competitiveness
- Your site security

Nothing will stop your operations.

Schneider Electric: your Secure Power Solutions' trusted advisor

With an unrivaled range of adaptable or specific systems and customizable solutions backed up by global services and a worldwide project capability, Schneider Electric is the natural and best-in-class partner for customers in key industry sectors, infrastructure and buildings.

APC by Schneider Electric and GUTOR solutions combined with fully engineered cooling systems offer you **3 key benefits** including:

Availability

- Whatever your constraints and objectives
- Wherever your building, infrastructure or industry is located

Adaptability

- Our systems are planned and built to meet your requirements
- With highly adaptable and customizable solutions to the standards required by your industry sector or environment

Performance

- Offering the best combination of efficiency, reliability, energy savings and reduced operating costs

What can Schneider Electric do for you?

- Adaptable and/or modular solutions with the lowest total cost of ownership over time
- A complete electrical distribution architecture designed to maximize uptime
- Energy efficiency and maintenance optimization to save up to 30% on operating costs
- Service teams to help improve your performance throughout your complete life cycle
- Integrated security to ensure peace of mind
- Environmentally friendly design and implementation of global secure power solutions
- Customized services for mission-critical applications that can be implemented at any stage in your life cycle.

Our expertise is right there for you:

- Pre-sales
- Project management
- Customization facility
- Test laboratory
- Services

Green, the color of sustainable quality

For Schneider Electric, "Go Green" means implementing integrated energy management solutions in industry, infrastructure and buildings,

The greener, the better

- Increased efficiency, quality and performance
- Enhanced safety for people, systems and equipment
- Energy savings and operating cost reductions

An unrivaled range of products

From “off-the-shelf” products to

Meeting your specific individual requirements

Schneider Electric’s unrivaled range: from “off-the-shelf” products to sophisticated solutions with specific features and architectural implementation.
Schneider Electric’s unique “Engineered-To-Order” approach: experts working for you to analyze your present and future needs and to define the adaptation and customization required for products as well as any specific upgradable architecture needs.

UPS

Wide, pre-defined combination of UPS and accessories + options. Reinforced by tailored products to meet specific mechanical or environmental constraints.

Single-phase UPS

- Smart-UPS™ 0.75 to 5 kVA / p. 9
- Smart-UPS On-line™ 1 to 20 kVA / p. 9
- Symmetra 2 to 16 kVA / p. 9

Power quality products

- AccuSine - Active filter 20 to 120 A / p. 23
- MGE Upsilon STS - Static Transfer Switch 30 to 2000 A / p. 23

Three-phase UPS

- MGE Galaxy 3500 3:1 - 3:3 10 to 40 kVA / p. 11
- MGE Galaxy 1000 PW 3:1 30 to 80 kVA / p. 11
- MGE Galaxy 5500 3:3 20 to 120 kVA / p. 12
- MGE Galaxy 7000 3:3 160 to 500 kVA / p. 12
- MGE Galaxy 9000 3:3 800 to 900 kVA / p. 13
- Symmetra MW 400 to 1600 kVA / p. 13

An extensive catalog of options and extensions

An outstanding architectural design and implementation capability

sophisticated customized solutions!

Application specific

Developed for different standards and industries (such as Marine Data center, Wind farm, ...).

- Symmetra PX
  16 to 500 kW / p. 15
- Smart-UPS On-line
  Wind turbine
  1 to 6 kVA / p. 16
- Smart-UPS On-line Marine
  1 to 6 kVA / p. 16
- MGE Galaxy 5000 Marine 3:3
  20 to 120 kVA / p. 17
- MGE Galaxy 6000 Marine 3:3
  160 to 800 kVA / p. 17

Fully customized solutions

Engineered to order for industry sectors such as oil and gas, power-generation mining.

- GUTOR MXP modular UPS and MDC rectifier 24 to 220 VDC / p. 19
- GUTOR MXW Inverter
  48 to 220 VDC / p. 19
- GUTOR MDD DC/DC Converter
  24 to 220 VDC / p. 19
- GUTOR PXP 3:1
  5 to 160 kVA / p. 20
- GUTOR PXP 3:3
  5 to 160 kVA / p. 20
- GUTOR PEW 3:1
  5 to 200 kVA / p. 20
- GUTOR PDW 3:3
  10 to 220 kVA / p. 20
- GUTOR SDC rectifier
  5 to 200 kW / p. 21
- GUTOR Inverter WxW 3:1
  5 to 200 kVA / p. 21
- GUTOR Inverter WxW 3:3
  10 to 220 kVA / p. 21

Global electrical architecture

Involving architectural solutions and services capabilities.

Schneider Electric can provide you with specific pre-qualified power architectures including UPS with a vast range of options, accessories and critical components.
Your specific needs can also be addressed by a "turnkey" architecture designed by Schneider Electric to encompass your entire secure electrical distribution requirements.

Meeting 100% of your specific requ

		Solution	Power Range	Page
Single-phase UPS		Smart-UPS	0.75 to 5 KVA	9
		Smart-UPS On-Line	1 to 20 KVA	9
		Symmetra	2 to 16 KVA	9
Three-phase UPS		MGE Galaxy 3500 3:1 - 3:3	10 to 40 KVA	11
		MGE Galaxy 1000 PW 3:1	30 to 80 KVA	11
		MGE Galaxy 5500 3:3	20 to 120 KVA	12
		MGE Galaxy 7000 3:3	160 to 500 KVA	12
		MGE Galaxy 9000 3:3	800 to 900 KVA	13
		Symmetra MW	400 to 1600 KVA	13
Application specific		Symmetra PX	16 to 500 KW	15
		Smart-UPS On-Line Wind Turbine	1 to 6 KVA	16
		Smart-UPS On-Line Marine	1 to 6 KVA	16
		MGE Galaxy 5000 Marine 3:3	20 to 120 KVA	17
		MGE Galaxy 6000 Marine 3:3	160 to 800 KVA	17
Fully customized solutions (GUTOR)		GUTOR MXP Modular UPS and MXW inverter	48 to 220 VDC	19
		GUTOR MDC Rectifier and MDD DC/DC converter	24 to 220 VDC	19
		GUTOR PXP 3:1 and 3:3	5 to 160 KVA	20
		GUTOR PxW AC UPS single-phase output	5 to 200 KVA	20
		GUTOR PxW AC UPS three-phase output	10 to 220 KVA	20
		GUTOR SDC Rectifier	5 to 200 KW	21
		GUTOR Inverter WxW 1-phase output	5 to 200 KVA	21
		GUTOR Inverter WxW 3-phase output	10 to 220 KVA	21
Power quality products		AccuSine - Active filter	20 to 120 A	23
		MGE Upsilon STS - Static Transfer Switch	30 to 2000 A	23

irements

Schneider Electric has the unique capability of meeting 100% of your needs and objectives thanks to an extensive catalog of single-phase and three-phase scalable products - with a wide performance range - which comply with the certification and standards requirements of your industry.

In the Healthcare sector, Schneider Electric systems are fully compliant with relevant electrical standards such as IEC 60364-7-710, NFC 15 211, NF EN 61557-8.

Water	Airports	Healthcare	Semiconductor plant	Manufacturing industry	Marine & offshore	Oil & gas	Power Generation	Wind farm	Mining	Transportation	Data centers
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Adaptable products APC by Schneider Electric

Single-phase UPS

Single-phase Multiple options Total reliability

A single-phase Uninterruptible Power Supply (UPS) enables decentralized protection.

A single-phase UPS is installed close to the critical equipment, thereby improving the power quality. These systems are easily integrated into the installation, as they come in various forms (tower, rack) and can be simply connected to network/loads by an outlet.

Our customers demand versatile and highly reliable products developed for different conditions. APC by Schneider Electric designs and provides the widest range of standard single-phase products as well as adapted single-phase products.

Standard offering - providing great value

The extensive standard single-phase, Smart UPS of APC by Schneider Electric family provides great value to customers with demanding power environments, with features that include:

- very wide input voltage range
- extremely precise output voltage regulation
- frequency regulation
- internal bypass
- input power factor correction

PowerChute Business Edition software provides UPS management, safe system shutdown and innovative energy management capabilities.

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Solutions based on standard products, designed to meet specific local application needs

Adapted Solutions are designed around standard products to ensure the highest quality and reliability.

Adapted Solutions can take many forms.

- Product adaptation: standard products can be re-engineered to meet a specific standard or an application with special needs.
- Environmental adaptation: provides an easy-to-install turnkey solution fitting a specific environment. These solutions typically combine single-phase UPS units along with associated batteries, service bypass panel and specific AC distribution.

Smart-UPS

0.75 to 5 kVA

Single-phase output units utilizing line interactive topology, with sine wave output

Designation		SMT750I	SMT1000I	SMT1500I	SMT2200I	SMT3000I	SUA5000RMI5U
Power/Runtime (VA / W / min) (Full load)		750 / 500 / 5	1000 / 670 / 6	1500 / 980 / 7	2200 / 1980 / 9	3000 / 2700 / 5	5000 / 4000 / 9
Extension Battery Pack		/					
Management and control cards		SmartSlot					SmartSlot APC9630 NMC pre-installed
SmartSlot							
Management software		PowerChute Business Edition (PCBE)					PCNS
Serial comms.		RJ45 (serial) and USB					DB9 or USB
Input connection		IEC-320 C14		IEC-320 C20			Hard wire
Nominal Input Voltage		230V					
Output connections	Type	IEC-320					
	Quantity	(mini 6) C13	(mini 8) C13	(mini 8) C13	(8) C13, (1) C19		(8) C13, (2) C19
Nominal Output Voltage		230V					
Physical Characteristics (HxWxD) mm / Unit weight kg							
Tower		161x138x363 / 13.2	219x171x439 / 18.9	219x171x439 / 24.1	435x197x544 / 48.8	435x197x544 / 52.5	222x432x660 / 97.7

Specific rack mount versions are also available

Extended run single-phase output units utilizing line interactive topology, with sine wave output and runtime expansion capability

Designation		SMX750I	SMX1000I	SMX1500 RMI2U	SMX2200RMHV2U	SMX3000 RMHV2U	SMX3000 RMHV2UNC	SUA2200XLI	SUA3000XLI	SUM1500 RMXLI2U	SUM3000 RMXLI2U
Power/Runtime (VA / W / min) (Full load)		750 / 600 / 14	1000 / 800 / 8	1440 / 1200 / 6	2200 / 1980 / 10	3000 / 2700 / 6	3000 / 2700 / 6	2200 / 1980 / 9.3	3000 / 2700 / 5.0	1500 / 1425 / 11.9	3000 / 2850 / 3.5
Management and control cards		Optional via SmartSlot					AP9631 Fitted	Optional via SmartSlot		AP9631 Fitted	
Management software		PCBE					PCNS	PCBE		PCBE and PCNS	
Serial comms.		RJ45, USB						DB9 RS-232 or USB		DB9 RS-232	
Input connection		IEC-320 C14		IEC-320 C20						IEC-320 C14	IEC-320 C20
Nominal Input Voltage		230V		208V or 220 or 240 V				230V			
Output connections	Type	IEC-320									
	Quantity	(8) C13		(8) C13, (1) C19				(8) C13, (2) C19		(9) C13	(7) C13, (1) C19
Nominal Output Voltage		230V									
Tower (T) / Rack (R) (Rack space)		T / R (2U)	T / R (2U)	R / T (2U)	R / T (2U)	R / T (2U)	R / T (2U)	T / R / 5U	T / R / 5U	T / R / 2U	T / R / 2U
Physical Characteristics (HxWxD) mm / Unit weight kg		432x89x490 / 22.1	432x89x490 / 22.9	89x432x490 / 24.8	85x432x667 / 37.3	85x432x667 / 37.3	85x432x667 / 37.3	432x196x503 / 55	432x196x503 / 55	86x432x678 / 46.8	86x432x678 / 46.8

Smart-UPS On-Line

1 to 20 kVA

Single and three-phase output units utilizing double conversion online topology, with sine wave output and runtime expansion capability, Rack unit width of 432mm excludes mounting brackets

Designation		SURT1000	SURT2000	SURTD3000	SURTD5000	SURT6000	SURT8000	SURT10000	SURT15
Power/Runtime (VA / W / min) (Full load)		1000 / 700 / 10.2	2000 / 1400 / 4.1	3000 / 2100 / 14.1	5000 / 3500 / 6.3	6000 / 4200 / 5.3	8000 / 6400 / 7.3	10000 / 8000 / 4.8	15000 / 12000 / 8.3
Management and control cards		Optional via SmartSlot			AP9631 Fitted				
Management software		PowerChute Business Edition (PCBE)			PowerChute Network Shutdown (PCNS)				
Serial comms.		DB9		RJ45	DB9				
Input connection		IEC-320 C14	IEC-320 C20		Hard Wire (HW) termination		Hard Wire (HW) termination (1PH+N+G) or (3PH+N+G)		
Nominal Input Voltage		230V				230V (1Ø) or 400V (3Ø)			
Output connections	Type	IEC-320					Hard Wire (HW) termination and IEC-320		
	Quantity	(6) C13		(8) C13, (2) C19			Hard Wire (HW), (4) C13, (4) C19		HW (1Ø / 3Ø), (8) C19 (1Ø)
Nominal Output Voltage		230V							
Physical Characteristics* (HxWxD) mm / Unit weight kg		*according to physical arrangement need to be completed with references below							
Tower SURTxxxxXLI		85x432x483 / 23	85x432x483/ 25	130x432x660 / 54.6	130x432x660 / 54.6	130x432x660 / 54.6	263x432x736 / 110.9	263x432x736 / 110.9	533x432x773 / 247.7
Rack SURTxxxxRMXLI		432x85x483 / 23	432x85x483 / 25	432x130x660 / 54.6	432x130x660 / 54.6	432x130x660 / 54.6	432x263x736 / 110.9	432x263x736 / 110.9	533x432x773 / 247.7

Symmetra

2 to 16 kVA

APC Symmetra® LX Single-phase output units utilizing double conversion online topology, with sine wave output, runtime expansion capability and N+1 configurable

APC reference		SYH2K 6RMI	SYH4-SY H6K6RMI	SYA4K 8I	SYA8K 8I	SYA4K 8RMI	SYA8K 8RMI	SYA8K 16I	SYA12K 16I	SYA16K 16I	SYA8K 16RMI	SYA12K 16RMI	SYA16K 16RMI
Power/Runtime (kVA / kW / min) (Full load)		2 / 1.4	4/2.8 4/6 4.2 4.2	4 / 2.8	8 / 5.6	4 / 2.8	8 / 5.6	8/ 5.6	12 / 8.4	16 / 11.2	8 / 5.6	12 / 8.4	16 / 11.2
		12.6	12.7	7.5	7.6	7.5	7.5	7.6	7.5	7.5	7.5	7.5	7.5
Management and control cards		AP9631 Fitted											
Management software		PowerChute Network Shutdown (PCNS)											
Serial comms.		DB9											
Input connection		Hard Wire (HW) termination		Hard Wire (HW) termination (1PH+N+G) or (3PH+N+G)									
Nominal Input Voltage		230V		230V (1Ø) or 400V (3Ø)									
Output connections	Type	IEC-320		PDU options available		IEC-320		PDU options available			IEC-320		
	Quantity	(8) C13, (2) C19		PDU options available		HW (1PH+N+G), (8) C13, (6) C19		PDU options available			HW (1PH+N+G), (8) C13, (10) C19		
Nominal Output Voltage		230V											
Tower (T) / Rack (R) (Rack space)		R (8U)		T		R (13U)		T			R (19U)		
Physical Characteristics (height x width) mm		356x483	356x483	671x483	671x483	572x472	572x472	937x483	937x483	937x483	838x472	838x472	838x472
Depth mm / weight kg		730 / 75	730 / 104-134	726 / 158	726 / 202	688 / 135	688 / 179	726 / 220	726 / 264	726 / 308	688 / 199	688 / 243	688 / 287

Extended runtime model also available SYA8K16IXR 8 kva / 57.4 min, SYA12K16IXR 12 kVA / 35.4 min, SYA16K16IXR 16kVA/ 24.7 min

UPS products APC by Schneider Electric

Three-phase UPS

Products with built-in modularity, flexibility and centralized protection

Three-phase UPS solutions allow for centralized protection, which improves the TCO (Total Cost of Ownership) through lower costs of installation and maintenance.

APC by Schneider Electric designs and provides the widest range of standard and adaptable three-phase products. The adapted products are designed using a project-by-project approach called engineering-to-order.

Core offer

Our Three-phase UPS Range offers state-of-the-art technology that increases availability, flexibility and performance.

Availability: integrated maintenance bypass, redundant function (redundant communication card) parallel UPS, conformity with industry standards.

Adaptability: scalable power through parallel capacity.

Performance: low-input harmonics and high-input power factor correction and high efficiency.

Adapted Solutions take account of:

Mechanical UPS modifications: impact of specific environment (dust, water, rodents...) and other requirements (RAL, top/bottom entries, lock...).

Environmental adaptation. Batteries with long autonomy, low voltage distribution panel, coupling panel...

Many options are available

MGE Galaxy 3500
3:1 - 3:3

10/15/20/30/40 kVA

APPLICATIONS

- Commercial Buildings
- Transportation and Infrastructures
- Telecommunication
- Technical facilities
- Industrial Plants and process protection

CHARACTERISTICS

Power ratings	3:3 - 10, 15, 20, 30, 40 kVA 3:1 – 15, 20, 30, 40 kVA
Input power factor	> 0,98 at load > 50%
Output power factor	0.8
Battery	Maintenance free, integrated–sealed lead-acid
Parallel capability	Up to 4 units for capacity or redundancy
Front display	Multi-function LCD Status and control console
Efficiency	96% at 100% linear load (+ or – .5%)
Communication	Network SNMP and environmental monitoring (AP9631), supplied with the UPS
Input ratings	400 V - 3-phase – hard wire -(3PH + N + G)
Output ratings	400 V and 230 V
Warranty	1 year

FEATURES

- 3:1 and 3:3 version available
- Compact form factor, Reduced footprint
- Best-in-class efficiency (96%)
- Dual mains input
- Hot Swappable Batteries
- Input Power Factor Correction
- Parallel up to 4 modules for capacity or redundancy
- User-replaceable air filters start up service included IP 51 rating Sturdy enclosure

OPTIONS

- Matching External runtime frame
- Single and parallel bypass panel - wall-mounted
- Empty Battery frame for third-party batteries
- Empty frame for third-party transformers
- Longlife batteries (modular, 10-12 yrs Eurobat)
- Seismic Brackets
- User-replaceable air filters
- Network management card (AP9635) with environmental monitoring, Modbus, Teleservices

DIMENSIONS

UPS (Wide Tower) › **HxWxD:** 1490 x 523 x 838 mm
Weight: 656 kg maximum
UPS (Narrow Tower) › **HxWxD:** 1490 x 352 x 838 mm
Weight: 306 kg maximum
External runtime frame › **HxWxD:** 1499 x 523 x 925 mm
Weight: 776 kg maximum

MGE Galaxy 1000 PW
3:1

30/40/60/80 kVA

APPLICATIONS

- Mission-critical environments
- Medium Data centers
- Industrial plants
- Telecommunication centers

CHARACTERISTICS

	30, 40, 60, 80 kVA
	Up to 0,96 with THM filter
	0.8
	Adjacent, remote, open rack, VRLA, wet cell
	Up to 4 units for capacity or redundancy
	LCD with MIMIC LED display
	92% at 100% linear load (+ or - .5%) 97% eco mode
	RS232, RS485, network SNMP, dry contacts
	400 V
	230 V
	1 year

FEATURES

- 6-pulse rectifier
- Low kVAR input filter
- Field upgradeable
- Parallel ready N+1
- Modular architecture
- Integrated maintenance bypass
- Extended runtimes available
- Top or bottom entry

OPTIONS

- Critical bus synchronization
- Matching 42 pole distribution
- 2CB parallel cabinet with veris meter
- Matching sub-main distribution
- Remote alarm status panel
- Line-up and match battery cabinet and auxiliary cabinets
- 65 kAIC rating

DIMENSIONS

UPS › **HxWxD:** 1900 x 1015 x 825 mm
Weight: 30/40 kVA = 740 kg and 60/80 kVA = 800 kg
Empty battery cabinet › **HxWxD:** 1900 x 1015 x 825 mm
Weight: 230 kg
Empty auxiliary cabinet › **HxWxD:** 1900 x 715/1015 x 825 mm
Weight: 135 kg

MGE Galaxy 5500 3:3

20/30/40/60/80/100/120 kVA

APPLICATIONS

- Medium Data Centers
- Industrial Plants
- Telecommunication Centers

CHARACTERISTICS

Power ratings	20, 30, 40, 50, 60, 80, 100, 120 kVA
Input power factor	0.99
Output power factor	0.9
Battery	Adjacent, Integrated Remote, Open Rack VRLA
Parallel capability	Up to 6 units for capacity or redundancy
Front display	5 inch graphic display
Efficiency	Up to 94% at 100% load (= or – .5%)
Communication	RS232, RS485, Network SNMP, Dry Contacts
Input ratings	400 V
Output ratings	400 V
Warranty	1 year

FEATURES

- Dual input
- Step Load Voltage Stabilization
- Intelligent Battery Management
- Bottom Entry Standard
- High-Power Density Design
- Input Distortion Management
- Front Access Electrical Connections
- Internal Maintenance Bypass
- User-Friendly multi language Display with 2500 event logging
- Startup services included

OPTIONS

- Matching adjacent Empty Battery cabinet
- Match adjacent Battery cabinet
- Empty Auxillary Cabinet
- Matching External bypass cabinet
- Parallel System bypass cabinet
- Distribution Cabinet
- Back-feed protection
- IP 32 pack
- Fan Redundancy
- External Synchro Board to be used with STS
- Input/output transformers in matching cabinet

DIMENSIONS

MGE Galaxy 7000 3:3

160/200/250/300/400/500 kVA

APPLICATIONS

- Mission-Critical Environments
- Data Centers
- Industrial Plants
- Telecommunication Centers

CHARACTERISTICS

Power ratings	160, 200, 250, 300, 400, 500 kVA
Input power factor	> 0,99
Output power factor	0.9
Battery	Lead-acid batteries (vented, sealed), Ni-Cad
Parallel capability	Up to 8 units
Front display	User-Friendly Alphanumerical Display
Efficiency	Graphical display (18 languages)
Communication	Alarm relay card, Network Management card, Industrial Network Management card
Input ratings	250 V to 470 V, three-phase
Output ratings	380, 400, 415, 400 V +/- 1%
Warranty	1 year

FEATURES

- Flexible and Very Adaptable
- Advance Electrical Features
- Parallel Capable
- High Efficiency
- Output Synchronization to external source
- High-Availability Architectures Component
- Startup service included

OPTIONS

- Top entry
- Battery coupling
- IP32
- Back-feed Mains 1 and 2
- Isolation transformer in cubicle
- Static Bypass cubicle (800, 1200, 2000 kVA)
- Auxiliary and Battery Cubicle: dimension W=(400, 712, 1012 or 1412), D=815, H=1900

DIMENSIONS

MGE Galaxy 9000 3:3

800/900 kVA

APPLICATIONS

- Mission-Critical Environments
- Data Centers
- Industrial Plants
- Telecommunication Centers

CHARACTERISTICS

Power ratings	800, 900 kVA
Technology	Double Conversion Technology
Input power factor	Up to 0,99
Output power factor	0,9 (800 kVA), 0,8 (900 kVA)
Battery	Lead-acid batteries (vented, sealed), Ni-Cad
Parallel capability	Up to 4 units as integrated parallel or up to 6 with centralised static switch
Front display	User-Friendly Alphanumerical Display
Efficiency	Up to 95%
Communication	Dry contact, 2 ports U-Talk (RS232), NMC (Network Management Card)
Input ratings	340 V to 460 V
Output ratings	380/400/415 V +/- 3%
Warranty	1 year

FEATURES

- Flexible and very adaptable
- High active power density (0.9PF)
- Strong electrical features
- Parallel capable output synchronization to external source
- High efficiency
- High-availability architectures component
- Large tactile color display
- Startup service included

OPTIONS

- Top entry
- Battery coupling
- Auxiliary and Battery Cubicle: Dimension W=(800 or 1200), D=840, H=1900
- Static Bypass cubicle (800, 1200, 2000, 3200, 4800 kVA)

DIMENSIONS

UPS › **HxWxD:** 2000 x 3600 x 840 mm
Weight: 4100 kg

UPS + 12 Pulse › **HxWxD:** 2000 x 4400 x 840 mm
Weight: 5600 kg

Symmetra MW Modular UPS

400/600/800/1000/ 1200/1400/1600 kVA

APPLICATIONS

- Medium/large data centers, buildings, or facilities
- Healthcare facilities
- Mission-critical environments

CHARACTERISTICS

	400 to 1600 kW, scalable in 200 kW increments
	Double conversion technology
	Unity
	Unity (kVA=kW)
	Valve-Regulated Lead-Acid, Vented Lead-Acid, Nickel Cadmium, Lithium Ion
	Up to 9 UPS for 14.4MW of capacity or redundancy – the world's largest UPS solution
	Touchscreen LCD Display
	>97%
	Touch screen LCD display
	400 V 3-phase + N + G
	400 V 3-phase + N + G
	1 year

FEATURES

- Fault-tolerant module or system level N+1 redundancy
- Universal battery support
- Modular design
- Battery failure notification
- No rear access required
- Unity power factor corrected (input and output)
- Dual mains input, top or bottom feed
- Startup service included
- InfraStruxure Central compatible
- Static Bypass Switch (internal, 400-600 kW; external, 800-1600 kW)
- Ultra-high efficiency (>97% at 85% load; 96% at 45% load; 94% at 25% load)

OPTIONS

- Third-Party Battery Cabinets
- Maintenance Bypass Cabinet
- UPSync™ Module

DIMENSIONS WITHOUT BATTERY

MW400 › **HxWxD:** 2032 x 2114 x 1067 mm
Weight: 2500 kg

MW1600 › **HxWxD:** 2032 x 5486 x 1067 mm
Weight: 6376 kg

External Bypass SSW -> **HxWxD:** 2032 x 1602 x 1067 mm
Weight: 725 kg

Application specific APC by Schneider Electric

Single and three-phase UPS

Specific designs to comply with your specific application needs

Certain industries have distinctive mission-critical requirements, as well as industry-specific standards they must adhere to. To serve these markets, APC by Schneider Electric has created its specific line of products, designed to fully meet your unique requirements.

In demanding environments, specific features make all the difference...

Our extensive ability to adapt our products to specific needs enables us to ensure 100% compliance with the certification and standards requirements for target markets.

We have developed specific systems for various markets like marine/offshore, wind turbines, data centers / infrastructure and applications such as emergency lighting.

Scalable offer for Data centers

Symmetra PX is the core of the InfraStruxure solution.
InfraStruxure™ provides scalable and adaptable data center IT room architecture.

Symmetra PX 48 All-in-One

16/32/48 kVA

APPLICATIONS

- Data closets
- Small data centers
- Medium data centers
- High-density zones

CHARACTERISTICS

Power ratings	16, 32 and 48 kVA
Output power factor	1
Battery	Valve-regulated lead-acid
Parallel capability	None
Front display	PowerView Local Display
Efficiency	95%
Communication	UPS Network Management Card (embedded)
Input voltage	400V, 3-phase + N + G
Output voltage	400V, 3-phase + N + G
Warranty	1 year

FEATURES

- Single-rack design
- Hot-swappable power modules
- Hot-scalable batteries (5-8-year life)
- Front access only
- Hot-swappable static bypass switch
- Modular Power Distribution with 18 poles
- Dual mains input, top or bottom feed
- Startup service included
- TÜV-verified high efficiency (95% at 30% load)
- Network-manageable
- Redundant intelligence module

OPTIONS

- Extended runtime battery frames
- Secondary Network Management Card (HTTP/Telnet/SNMP)
- Modular Power Distribution Units

DIMENSIONS

HxWxD	2011 x 600 x 1070 mm
Weight	307 kg (without batteries and power modules) 796 kg (fully populated with batteries and power modules)

Symmetra PX 96/160

32/64/96/128/160 kVA

APPLICATIONS

- Small/medium data centers
- High-density zones of large data centers

CHARACTERISTICS

Power ratings	32, 64, 96, 128, 160 kVA
Output power factor	1
Battery	Valve-regulated lead-acid
Parallel capability	None
Front display	PowerView Local Display
Efficiency	95%
Communication	UPS Network Management Card (embedded)
Input voltage	230V/400V 3-phase + N + G
Output voltage	230V/400V 3-phase + N + G
Warranty	1 year

FEATURES

- Hot-scalable power modules
- Hot-swappable batteries (5-8 year life)
- Unity power factor corrected
- Dual mains input, top or bottom feed
- Startup service included
- Hot-swappable static bypass switch
- Redundant intelligence module
- TÜV-verified high efficiency (95% at 30% load)
- Network-manageable
- Highest energy density in its class

OPTIONS

- Integrated Modular Power Distribution (36 poles)
- Additional Modular Power Distribution (up to 72 poles)
- Line-up/Remote Extended Runtime Battery Frames
- Secondary Network Management Card (HTTP/Telnet/SNMP)

DIMENSIONS

HxWxD	1991 x 1800 x 1070 mm
Weight	955 kg (160 kW UPS only, without batteries) 2749 kg (160kW UPS only, with 6-min runtime)

Symmetra PX 250/500

25/500 kVA

APPLICATIONS

- Medium/large data centers
- Mission-critical environments

CHARACTERISTICS

Power ratings	One UPS: 250 kVA to 500 kVA, in 25 kVA increments. Fully populated parallel system: 25 kVA to 2 MW, in 25 kVA increments
Output power factor	1
Battery	Valve-regulated lead-acid
Parallel capability	Up to 4 UPSs, for capacity or redundancy
Front display	Localized 25.4cm touchscreen display
Efficiency	96%
Communication	UPS Network Management Card (AP9635) included
Input voltage	230/400 V or 240/415 V 3-phase + N + G
Output voltage	230/400 V or 240/415 V 3-phase + N + G
Warranty	1 year

FEATURES

- Hot-scalable power modules
- Hot-swappable batteries (5-8 year life)
- Unity power factor corrected
- Dual mains input, top or bottom feed
- Startup service included
- Hot-swappable static bypass switch
- Redundant intelligence module
- Module or system level N+1 redundancy
- No rear access required
- Ultra-high efficiency (96% at 35% load, 95% at 25% load)
- Network-manageable

OPTIONS

- Third-Party Battery Cabinets
- Extended Runtime Battery Frames
- Battery Breaker Enclosure
- Maintenance Bypass with Distribution Cabinet
- Battery Sidecar
- Bottom Feed Frame
- Modular Power Distribution

DIMENSIONS

HxWxD	1991 x 2200 x 1070 mm (without batteries) 1991 x 5200 x 1070 mm (with 6-min. runtime)
Weight	1722 kg (without batteries) 8336 kg (with 6-min runtime)

Wind farm

Smart-UPS On-Line Wind Turbine

1 to 6 kVA

	SURT 1000XLIX551	SURT 3000XLIX438	SURT 5000XLIX438	SURT 5KSR3UXIX438[2]	SURT 6000XLIX551
Power Capacity	1000VA (700W)	3000VA (2100W)	5000VA (3500W)	5000VA (4000W)	6000VA (4200W)
Input Voltage (default 230V)	220, 230, 240V				
Input Voltage Range (Full Load, t ≤ 40°C)	160V to 280V				
Input Voltage Range (Half Load, t ≤ 40°C)					
Input Voltage Range (Full Load, t= 55°C)					
Input Voltage Range (Half Load, t= 55°C)					
Input Frequency Range	45Hz – 65Hz				
Input Connection	IEC 320 C14	Hardwire (H, N, G)			
Output Voltage (default 230V)	220, 230, 240V			208, 220, 230, 240V	220, 230, 240V
Output Voltage Regulation					
Output Frequency	50/60Hz +/- 3%				
Efficiency	88%	92%	92%	92%	92%
Output Connections	IEC 320 C13	(8) IEC 320 C13 (2) IEC 320 C19	Hardwire (H, N, G)		(8) IEC 320 C13
Internal bypass	YES	YES	YES	YES	YES
BATTERIES AND RUNTIME					
Runtime at Full Load	10 min	14 min	5 min	14 min	5 min
Long life batteries	NO	NO	NO	YES	NO
Runtime with (1) External Battery Pack					
Runtime with (2) External Battery Pack					
External Battery Pack Part Number	SURT48XLBP	SURT192XLBP	SURT192XLBP		SURT192XLBP
Maximum Number of Battery Packs	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
PHYSICAL					
Rack Height	2U	3U	3U	3U	3U
Dimensions (mm) H x W x D	432 x 85 x 483	432 x 130 x 660	432 x 130 x 660	432 x 133 x 545	432 x 133 x 545
Weight (Kg)	23.0	23.0	54.5	18.2	54.5
Emergency Power Off	NO	YES	YES	YES	YES
Communication Port	DB-9 RS-2323	DB-9 RS-232; Pre-installed Relay I/O Card			
Marine Filter[1] Part Number					

Marine

Smart-UPS On-Line Marine

1 to 6 kVA

	SURT 1000XLIM	SURTD 2200XLIM	SURTD 3000XLIM	SURT 6000XLIM
Power Capacity	1000VA (700W)	2200VA (1540W)	3000VA (2100W)	6000VA (4200W)
Input Voltage (default 230V)	220, 230, 240V			
Input Voltage Range (Full Load, t ≤ 40°C)	160V to 280V			
Input Voltage Range (Half Load, t ≤ 40°C)	100V to 280V			
Input Voltage Range (Full Load, t= 55°C)	180V to 280V			
Input Voltage Range (Half Load, t= 55°C)	112.5V to 280V			
Input Frequency Range	45Hz – 65Hz			
Input Connection	IEC 320 C14	IEC 320 C14	IEC 320 C20	Hardwire (H, N,G)
Output Voltage (default 230V)	220, 230, 240V			
Output Voltage Regulation	+/- 1%			
Output Frequency	50/60Hz +/- 3%			
Efficiency	88%	90%	91%	92%
Output Connections	(6) IEC 320 C13		(8) IEC 320 C13	
	(2) IEC Jumpers	(2) IEC Jumpers (8) IEC 320 C 19	(2) IEC 320 C19 (2) IEC Jumpers	(2) IEC 320 C19 (2) IEC Jumpers
Internal bypass				
BATTERIES AND RUNTIME				
Runtime at Full Load	14 min	21 min	14 min	5 min
Long life batteries				
Runtime with (1) External Battery Pack	70 min	80 min	57 min	21 min
Runtime with (2) External Battery Pack	130 min	144 min	103 min	40 min
External Battery Pack Part Number	SURT48 RMXLBP	SURT192 RMXLBP	SURT192 RMXLBP	SURT192 RMXLBP
Maximum Number of Battery Packs	10	10	10	10
PHYSICAL				
Rack Height	2U	3U	3U	3U
Dimensions (mm) H x W x D	432 x 85 x 483	432 x 130 x 660	432 x 130 x 660	432 x 130 x 660
Weight (Kg)	23.0	54.5	54.5	54.5
Emergency Power Off	NO	YES	YES	YES
Communication Port	DB-9 RS-232	RJ-45 Serial	RJ-45 Serial	DB-9 RS-232
Marine Filter[1] Part Number	SURT023M	SURT023M	SURT023M	SURT024M

(1) Marine Filter Required for DNV Compliance in applications that require DNV EMC Class B (e.g. the bridge)
(2) Note: no internal battery – uses external battery system

Marine

MGE Galaxy 5000 Marine

20 to 120 kVA

	20/16	30/24	40/32	60/48	80/64	100/80	120/96
NORMAL AC SUPPLY INPUT							
Input voltage range (V)	250V (1) to 470 3 phases						
Input mains 1 and main 2	separate or common						
Frequency	50Hz/60Hz +/- 8 Hz						
Input power factor	> 0.99						
Input current total harmonic distortion (THDI)	< 3%						
BYPASS SYSTEM INPUT							
Nominal input voltage	340V to 470V 3 phases + neutral						
Frequency	50Hz/60Hz +/- 8 Hz						
OUTPUT							
Output voltage range (V)	380V - 400V - 415V - 440V +/-3% 3 phases + neutral						
Frequency	50Hz/60Hz						
Voltage regulation	+/- 1%						
Overload	150% 1 minute, 125% 10 minutes						
Output voltage total harmonic distortion	THD(U) < 2%						
Max load crest factor	‘3:1						
OVERALL EFFICIENCY							
Double conversion mode	up to 94%						
Economy mode	up to 97%						
ENVIRONMENTAL							
Storage temperature	-25°C to +45°C						
Operating temperature	up to +40°C (2)						
Operating altitude	1000 m						
PARALLEL-CONNECTION							
Modular	up to 6 modules						
STANDARD AND APPROVALS							
Performance and safety	IEC/EN 62040-1, IEC/EN 60950						
Performance and design	IEC/EN 62040-3						
Design and manufacturing	ISO 14001, ISO 9001, IEC 60146						
EMC immunity	IEC 61000-4-2 to 6						
EMC emissions	IEC 62040-2 C3						
Approval	TUV - LCIE - CE mark						
Marine approval	DNV-type approval				Designed according to IACS E-10 rules and classification society rules		
UPS DIMENSIONS AND WEIGHTS (DEPTH = 850 MM AND HEIGHT = 2260)							
UPS without batteries width in mm	710						
Weight	500				600		
BATTERY DIMENSIONS AND WEIGHTS (DEPTH = 850 MM AND HEIGHT = 2260)							
10 min autonomy width (mm)[4]	710					1010	
Weight	1000					1400	1500

(1) at 70% nominal load, (2) there is a risk of premature battery aging above 25°C, (3) 35°C for 8 hours, (4) other autonomy upon request

Fully customized solutions GUTOR by Schneider Electric

AC and DC System

Engineered for unique requirements

The GUTOR philosophy is to treat every customer order as a dedicated project.
GUTOR can supply an unrivaled degree of flexibility, with every system engineered to meet individual needs. The Gutor offer includes a range of UPS System inverters, rectifiers, battery chargers, AC and DC modular platforms. Gutor systems are built to last, with a design lifetime of more than 20 years.

In-depth expertise for extreme applications and conditions

Gutor by Schneider Electric solutions are designed, built and maintained to ensure outstanding performance even in the most extreme conditions: high humidity, extreme temperature variations, vibration, earthquake zones, deserts...

Many different customizations are available, including:

- Mechanical modification: color, IP up to 54, bus bar and size
- UPS environment: LV distribution panel, coupling cabinet, all types of batteries
- UPS performance: special sizing for both inverter and rectifier, various input, output and DC bus voltages
- Architecture combining AC UPS and DC (rectifier)

Customized documentation and system testing upon request...

GUTOR MXP UPS

48/110/125/220 VDC

	48V	110V	125V	220V
	Input			
Voltage*	230VAC			
Allowable tolerance	+/- 20%			
Current (per module)	12.9AAC			
Power factor	>0.99 @ output power >50%			
	Battery circuit			
Voltage	48VDC	110VDC	125VDC	220VDC
Voltage range	42–62VDC	87–150VDC	87–150VDC	170–295VDC
Current (per module)	56.0ADC	25.0ADC	22.0ADC	12.5ADC
	Output			
Voltage*	230VAC			
Tolerance	+/- 0.5%			
Adjustable range	200–242VDC			
Current (per module)	9.8AAC @ cos Ψ 0.8			
Efficiency	>85%			

GUTOR MDC Rectifier

24/48/110/125/220 VDC

	24V	48V	110V	125V	220V
	Input				
Voltage*	230VAC				
Allowable tolerance	+/- 20%				
Current (per module)	5.8AAC	12.9AAC			
Power factor	>0.99 @ output power >50%				
	Output				
Voltage	24VDC	48VDC	110VDC	125VDC	220VDC
Voltage range	21–33VDC	42–62VDC	87–150VDC	87–150VDC	170–295VDC
Current (per module)	50.0ADC	56.0ADC	25.0ADC	22.0ADC	12.5ADC
Efficiency	>91%				

GUTOR MXW Inverter

48/110/125/220 VDC

	48V	110V	125V	220V
	Input			
Voltage	40.8–67.5VDC	91.8–145VDC	91.8–145VDC	183.6–270VDC
Current (per module)	41.6ADC @ 48VDC	18.4ADC @ 108VDC	15.9ADC @ 125VDC	9.2ADC @ 216VDC
	Output			
Voltage*	230VAC			
Voltage range	+/- 0.5%			
Adjustable range	200–242VDC			
Current (per module)	9.8AAC @ cos Ψ 0.8			
Efficiency	>90%			

GUTOR MDD DC/DC Converter

24/48/110/125/220 VDC

	24V	48V	110V	125V	220V
	Input				
Voltage	91.7–300VDC				
Current (per module)	20.7A@110VDC / 10.3A@220VDC				
	Output				
Voltage	24VDC	48VDC	110VDC	125VDC	220VDC
Voltage range	21–33VDC	42–62VDC	87–150VDC	87–150VDC	170–295VDC
Current (per module)	50.0ADC	25.0ADC	11.0ADC	9.5ADC	5.5ADC
Efficiency	>89%				

* Applicable for 50Hz and 60Hz / 1-phase and 3-phase + N

GUTOR PXP AC UPS 1000 single-phase output

5/10/15/20/30/40/50/ 60/80/100/120/140/160 kVA

	PXP 1000 single-phase output
Type	
Ratings	5,10, 15, 20, 30, 40, 50, 60, 80, 100, 120, 140, 160 kVA
Operating temperature	- 10 to +40°C (max. 55°C on request)
Allowable air humidity	< 95% (non-condensing)
Noise level	55 – 65 dBA (depending on rating)
Communication	Modbus, RS-232 / 485, Ethernet
Altitude above sea level	< 1000 m without load de-rating
	Input
Rectifier	PFC technology (less than 5% distortion back to line power)
Voltage	3 x 380 / 400 / 415V (other voltages on request)
Voltage tolerance	- 10 / +15%
Battery circuit	
Nominal voltage	400VDC
Applicable batteries	Lead-Acid, Nickel Cadmium
	Output
Voltage	220 / 230 / 240V (others on request)
Tolerance (static)	+/- 1%
Frequency accuracy	< 0.01%
Efficiency	Up to 94% (depending on configuration)
Distortion	linear load: < 2% / non-linear load: < 5%
Overload inverter	230% / 60 ms, 150% / 1 min, 125% / 10 min
Overload bypass	1000% / 100 ms, 150% / 1 min, 125% / 10 min

GUTOR PXP AC UPS 3000 three-phase output

5/10/15/20/30/40/50/ 60/80/100/120/140/160 kVA

PXP 3000 three-phase output
5, 10, 15, 20, 30, 40, 50, 60, 80, 100, 120, 140, 160 kVA
- 10 to +40°C (max. 55°C on request)
< 95% (non-condensing)
55 – 65 dBA (depending on rating)
Modbus, RS-232 / 485, Ethernet
< 1000 m without load de-rating
Input
PFC technology (less than 5% distortion back to line power)
3 x 380 / 400 / 415V (other voltages on request)
- 10 / +15%
400VDC
Lead-Acid, Nickel Cadmium
Output
380 / 400 / 415V (others on request)
+/- 1%
< 0.01%
Up to 94% (depending on configuration)
linear load: < 2% / non-linear load: < 5%
230% / 60 ms, 150% / 1 min, 125% / 10 min
1000% / 100 ms, 150% / 1 min, 125% / 10 min

GUTOR PxW AC UPS single-phase output

5 - 200 kVA

	PEW single-phase output
Type	
Ratings	5-200 kVA (bigger on request)
Operating temperature	- 10 to +40°C (max. 55°C on request)
Allowable air humidity	< 95% (non-condensing)
Noise level	60 – 75 dBA (depending on rating)
Communication	Modbus TCP/IP,IEC 61850 (others on request)
	Input
Rectifier	6-pulse thyristor bridge (12-pulse on request)
Voltage	3 x 380 / 400 / 415V (other voltages on request)
Voltage tolerance	+ 10 / - 15%
Battery circuit	
Nominal voltage	110 / 125 / 220 / 400VDC
Applicable batteries	Lead-Acid, Nickel Cadmium
	Output
Voltage	220 / 230 / 240V (others on request)
Tolerance (static)	+/- 1%
Frequency accuracy	< 0.01%
Efficiency	Up to 93% (depending on configuration)
Distortion	linear load: < 2% / non-linear load: < 5%
Overload inverter	200% / 50-100 ms, 150% / 1 min, 125% /10 min
Overload bypass	1000% / 100 ms

GUTOR PxW AC UPS three-phase output

10 - 220 kVA

PDW three-phase output
10-200 kVA (bigger on request)
- 10 to +40°C (max. 55°C on request)
< 95% (non-condensing)
60 – 75 dBA (depending on rating)
Modbus TCP/IP,IEC 61850 (others on request)
Input
6-pulse thyristor bridge (12-pulse on request)
3 x 380 / 400 / 415V (other voltages on request)
+ 10 / - 15%
110 / 125 / 220 / 400VDC
Lead-Acid, Nickel Cadmium
Output
380 / 400 / 415V (others on request)
+/- 1%
< 0.01%
Up to 93% (depending on configuration)
linear load: < 2% / non-linear load: < 5%
200% / 50-100 ms, 150% / 1 min, 125% /10 min
1000% / 100 ms

GUTOR SDC Rectifier

Type	Rectifier / Battery Charger	
Ratings	24-220 V	25-1200 A
Operating temperature	- 10 to + 40°C (max. 55°C on request)	
Allowable air humidity	< 95% (non-condensing)	
Noise level	55 – 65 dBA (depending on rating)	
Communication	Modbus TCP/IP,IEC 61850 (others on request)	
	Input	
Rectifier	6-pulse thyristor bridge (12-pulse on request)	
Voltage	3 x 380 / 400 / 415V (other voltages on request)	
Voltage tolerance	+ 15 / - 25%	
	Output	
Voltage	24/48/110/125/220 VDC	
DC current tolerance	+/- 2%	
Efficiency	Up to 94% (depending on configuration)	
DC overcurrent capability	150% / 2s	

GUTOR WxW Inverter

5-200 kVA

Type	WEW single-phase output
Ratings	5-200 kVA (others on request)
Operating temperature	- 10 to + 40°C (max. 55°C on request)
Allowable air humidity	< 95% (non-condensing)
Noise level	60 – 75 dBA (depending on rating)
Communication	Modbus TCP/IP,IEC 61850 (others on request)
	Input
Voltage	110/125/220/400 VDC
Voltage tolerance	+ 20 / - 15%
	Output
Voltage	220 / 230 / 240V (others on request)
Tolerance (static)	+/- 1%
Frequency accuracy	< 0.01%
Efficiency	Up to 93% (depending on configuration)
Distortion	linear load: ≤3% / non-linear load: ≤5%
Overload inverter	200% / 50-100 ms, 150% / 1 min, 125% /10 min
Overload bypass	1000% / 100 ms

GUTOR WxW Inverter

10-220 kVA

WDW three-phase output
10-220 kVA (others on request)
- 10 to + 40°C (max. 55°C on request)
< 95% (non-condensing)
60 – 75 dBA (depending on rating)
Modbus TCP/IP,IEC 61850 (others on request)
Input
110/125/220/400 VDC
+ 20 / - 15%
Output
380 / 400 / 415V (others on request)
+/- 1%
< 0.01%
Up to 93% (depending on configuration)
linear load: ≤3% / non-linear load: ≤5%
200% / 50-100 ms, 150% / 1 min, 125% /10 min
1000% / 100 ms

Power quality products

Increase power availability and quality

Go further

Critical applications for the power supply require availability and quality.

Grant high availability of energy by redundant power supply and enhanced distribution:

- Guarantee the redundancy of the distribution line, effective up to the vicinity of the protected equipments
- Ensure and prevent the fault propagation to all the loads

Improve quality of energy with the control and selective neutralization of harmonics:

- Avoid nuisance tripping of circuit-breakers
- Reduce premature aging of equipment

Additional systems are a must

Additional systems further enhance the level of availability and quality of the requisite systems (water, air, electricity) within your complex infrastructure installations. These critical components are grouped into three families: STS (Static Transfer Switch), Synchronization Modules and AccuSine.

Synchronization modules for high-availability redundant installations:

- Suitable for all types of power sources
- Increased availability of the installation
- Ease of use and configuration

Increased power quality and availability with best-in-class power protection solutions

Upsilon Static transfer switches for true power supply redundancy and enhanced distribution

- Serviceability
- Increased Availability
- Manageability

MGE Upsilon STS

30 to 2000 A

APPLICATIONS

- Industrial applications
- Data Centers
- Telecommunication

CHARACTERISTICS

Power ratings	30 to 2000 A
Front display	
Communication	
Nominal Voltage	380 V (-35%) - 400 V – 415 V (+20%)
Compensated harmonic currents	
Efficiency (linear load and PF=0.8)	0.99
Warranty	1 year

FEATURES

- Simplifies installation and maintenance, while minimizing space requirements
- Independent control boards and dual cooling systems and power supplies ensure high-reliability performance
- Text and mimic diagrams display modes of operation, system parameters and alarms
- Allows isolation of a source for maintenance, without interrupting power to the protected loads
- Small footprint reduces required floor space

OPTIONS

- Communication: Network Management Card, JBus/ModBus card (supplied as standard), Status information card (supplied as standard)
- Open-frame version
- PDU distribution unit (36 16 A circuit-breakers incorporated in the H = 1900 cell, up to 100 A)
- Connection at the top of the unit

DIMENSIONS

- **HxWxD:** 30 A: 1430 x 610 x 550 mm
  Weight: 193 kg
- **HxWxD:** 630 kVA: 1900 x 715 x 825 mm
  Weight: 327 kg

SineWave active filter for controlled and selective neutralization of harmonics

- Secured application operation
- Energy savings and reduced TCO
- Ease of integration in existing installation

AccuSine - Active filter

20 to 120 A

APPLICATIONS

- Energy and Infrastructures
- Industry
- Buildings

CHARACTERISTICS

20, 30, 45, 60, 90, 120 A
User-Friendly Alphanumerical Display
JBus / ModBus card, Status information card
400 V – 20 +15%
H2 to 50, full equalization or individual equalization
1 year

FEATURES

- Very efficient harmonics compensation for improved power quality
- Energy savings thanks to less current in the network
- Global or local installation conditioning
- Very easy to install: wall-mounted
- Upgradable thanks to its high paralleling capabilities

OPTIONS

- CT: 300 to 6000 A open and close
- Teleservice: remote monitoring via the telephone system

DIMENSIONS

- **HxWxD:** 20/30 A: 680 x 540 x 280 mm
  Weight: 65 kg
- **HxWxD:** 45/60 A: 780 x 590 x 325 mm
  Weight: 110 kg
- **HxWxD:** 90/120 A: 2 x (780 x 590 x 325 mm)
  Weight: 2 x 110 kg

Energy management

«**StruxureWare™** software is a unique platform of applications and suites that gives you visibility into energy and other resource use across your organization. Control rising energy costs; meet reporting obligations; keep stakeholders informed and engaged. Get customized, timely information that eliminates departmental silos and conflict. And, when you deploy StruxureWare™ software within EcoStruxure™ integrated system architecture, you'll realize significant savings on capital and operational expenses.».

Solution suitable for several applications

• **HARDWARE PRODUCT**
Each Schneider Electric UPS and cooling unit is equipped with internal slots to accommodate several types of communication: dry contact,RS485, Ethernet (web server and e-mail notifi cation) and remote monitoring.

• **StruxureWare Data Center Expert** is easy to use and deploy with a user-friendly interface to monitor, manage, and control the hundreds or thousands of devices a company might have from a wide range of manufacturers. These devices include equipment that provides power, cooling, security, and environmental monitoring.

StruxureWare Building Operation ensures that buildings are energy efficient and effectively managed. It provides integrated monitoring, control and management of energy, lighting, HVAC and other building systems. StruxureWare Building Operation is powerful, scalable and easy to use system that delivers real performance.

StruxureWare Power Monitoring Expert is designed with the right user workflows, user context, and "out-of-the-box" functionality required monitoring and analysing the entire data center electrical distribution system: Medium Voltage (MV), Low Voltage (LV), and the IT Floor. This expert tool is specifically built to meet the needs of data center facility operators, technicians, & engineers. StruxureWare Power Monitoring Expert supports management level, business process tools, by natively integrating with StruxureWare Data Center Operation and by supporting industry standard data exchange technologies..

Network Management cards

- Web server and e-mail notification
- Network Shutdown
- InfraStruxure Central compatible
- SNMPv1/SNMPv3
- IPv4/IPv6
- Alarm, event and data logs
- Event log stores up to 500 events
- Remote access from any computer
- Remote monitoring modem
- Modbus RS485 (AP9635 only)
- Notify up to 50 computers of the UPS, chiller and air-conditioning unit status

What is StruxureWare software ?

Why StruxureWare ?

In a word: Software

What is it ?

In a few more words: It is Schneider Electric's platform of integrated software applications and suites that help our customers in every segment and across all geographies to maximize their business performance while conserving their resources.

Useful materials

StruxureWare software unifies powerful and innovative software applications from «shop floor to top floor» across 3 levels to maximize efficiency.

Cooling Solutions

Precision air-conditioning and technical chillers

Cooling: an extensive high-precision range

With its unrivaled extensive range of cooling units, chillers and precision air-conditioners, Schneider Electric provides the capability to integrate high-precision equipment specifically adapted to keep your critical applications running whatever the environmental conditions.

Energy saving and Performance

To provide you with the most effective solution, innovative cooling systems offer you first and foremost:

- Integrated "Free-cooling" for significant reductions in energy consumption
- Variable Speed Drive compressors for continuous regulation of cooling capacity
- Tandem technology for compressors in order to optimize part-load efficiency
- Highly efficient refrigerants to optimize the cooling circuit
- Double-screw or "oil-free" compressors on large chillers dedicated to secure power installations for even greater performance

Perfect connectivity for your global architecture

Cooling: an extensive high-precision range
All the cooling units can be utilized to achieve an overall architectural solution thanks to their ease of interconnection Modules.
The microprocessor controls "talk" to each other in order to provide a global solution for cooling, to be connected simply and directly to the most important Building Management Systems.

Aquaflair technical chillers

							
Range	Small / Medium applications			Medium applications	Large applications		
Series	LRA	ERA/ERC	ISA/ISC	ARA	BRE	BCE	BCWC
Cooling Capacity range [kW]	6-40	50-110	60-120	120-260	400-1200	300-1100	300-1300
Type	Air-cooled				Air-cooled		Water-cooled
Power Supply [V/ph/Hz]	230/1/50 - 400/3+N/50	400/3+N/50		400/3/50	400/3/50		
Configuration	Cooling				Cooling		
	Heat pump				Free-cooling		
		Free cooling					
Type of compressor	Scroll Single	Scroll Single/ Tandem	VSD Scroll Tandem	Scroll Tandem	Double Screw Single	Oil-free centrifugal compressors Single	
Refrigerant type	R410A			R407C	R134a		
Installation	Outdoor	Outdoor (ERA)	Outdoor (ISA)	Outdoor	Outdoor		
		Indoor (ERC)	Indoor (ISC)				Indoor

Uniflair precision air-conditioning

						
Series	Uniflaire AM	Uniflaire LE		Uniflaire AM	Uniflaire LE	
Cooling Capacity [kW]	5-20	20-90	90-160	5-20	20-65	65-110
Type	CHILLED WATER			DIRECT EXPANSION		
Condensing Options Features				Air-cooled		
				Water-cooled		
					Twin Cool	
					Energy Saving	
Power Supply [V/ph/Hz]	230/1/50 - 400/3+N/50	400/3+N/50		230/1/50 - 400/3+N/50	400/3+N/50	
Air Flow Configuration	Downflow			Downflow		
	Upflow			Upflow		
Configuration	Single Coil	Single / Dual Coil		Scroll Single*	Scroll Single/Tandem	
Type of compressor		Dual Redundant Coil				
Installation	Indoor			Indoor		

*Refrigerant type R410A

Uniflair precision air-conditioning for mobile telecommunication

			
Series	Uniflaire WM	Uniflaire MB	Uniflaire US
Cooling Capacity [kW]	5-17	5-13	4-14
Type	Down Flow	DIRECT EXPANSION	
Power Supply [V/ph/Hz]	230/1/50 - 400/3+N/50		
Air Flow Configuration	Downflow		Ceiling-mounted
	Upflow		Wall-mounted
Configuration	Direct free-cooling / Cooling only with or without heating		
Type of compressor	Scroll**		
Installation	Outdoor	Indoor	

**Refrigerant type R407C

Customer-specific global electrical architecture by Schneider Electric

We plan the solution for your specific...

Environment, business sector, productivity, business continuity, application... lead to different requirements in terms of power, management and protection of electrical power supplies.

The idea of systems and solutions with a specific architecture presupposes an in-depth study of your present and future requirements in order to define a solution combining:

- an installation designed to meet the power rating, degree of criticality and current operational or functional process requirements
- recommendations regarding potential upgrades to be included in the design
- Schneider Electric's system solutions and architecture include the key idea of maintainability, through online monitoring, preventive maintenance programs and its global services capability.
  All of this results in maximized uptime for you and uninterrupted operations to ensure best-in-class productivity and quality of service.
- project management and support for the installation going forward.

That's why Schneider Electric has created organizations capable of supporting you in analyzing, defining and implementing the global architecture for your power systems.

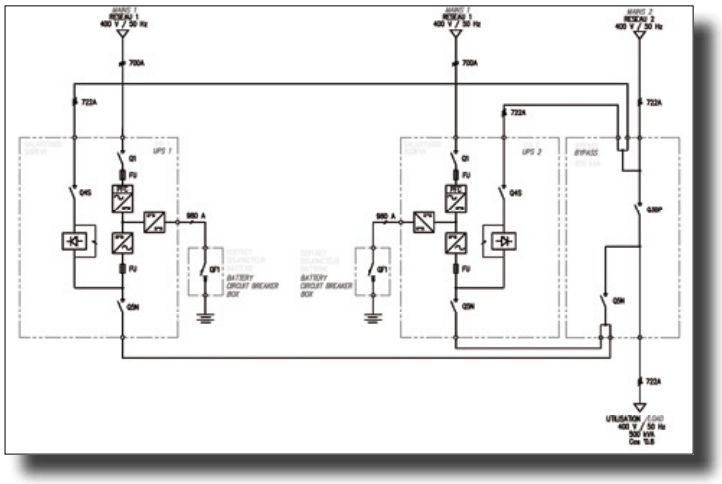
2 different levels of architecture

Secure Power architecture

The expertise of Schneider Electric's Project Design teams, the various levels of adaptability characteristic of the APC by Schneider Electric systems and the customization capabilities of the GUTOR by Schneider Electric solutions enable us to meet every kind of power protection requirement to offer you a fully compliant solution in terms of performance, operating costs, maintenance and scalability.

This architecture is based on:

- UPS, rectifier and their associated accessories (Back feed, Battery, transformer...)
- Distribution panel
- Critical components (Static transfer switch, active filter, flywheel and synchronization module)

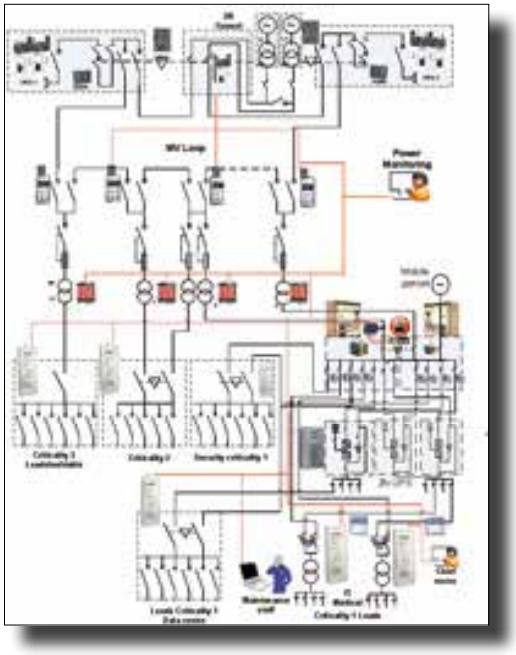


Pre-qualified electrical distribution architecture integrating secure power solutions

Schneider Electric is able to provide you with specific, pre-qualified power architectures for many different industries: Healthcare, Water and Waste treatment, Onshore connection...

These pre-qualified solutions are designed to:

- Ensure Availability
- Monitor energy and therefore Opex reduction
- Comply with standards or regulations
- Manage risks



Service excellence

A key value for Schneider Electric

Schneider Electric Critical Power and Cooling Service (CPCS) is committed to providing solutions that dramatically simplify the process of designing, deploying, and operating the world's most predictable and efficient infrastructures.

Our world-class services offer a smart way to protect your equipment, ensuring that your system is always operating at peak performance, thereby prolonging its life span.

Perhaps the best reason to choose Schneider Electric CPCS as your service provider, however, is the convenience of a total solution - systems, services and software available from a single source. This includes access to fully tested factory-certified parts, engineering revisions and firmware upgrades.

Services at every stage

Zoom on...

Installation Services

A Schneider Electric-certified installation and commissioning of your solution ensures your equipment is properly and safely configured for optimal performance and reliability.

Maintenance Services

Schneider Electric offers a comprehensive services portfolio designed to ensure your mission-critical applications receive the proper care and maintenance they need to operate at optimal levels – at all times.

Maintenance services include Preventive Maintenance Service Plans and response time upgrades where available.

Remote Monitoring Service

RMS is a 24/7 monitoring service that acts as a primary or secondary support function. Trained technicians will monitor the health status of the physical infrastructure to help diagnose, notify, and resolve problems before they become critical.

Battery Services

Battery service and replacement are vital components of any UPS maintenance program since one failed battery can compromise an entire system. Whether you need to replace one or all of your batteries, we can ensure they are a reliable backup.

Service Plans

Flexible service packages that offer hassle-free system maintenance to improve uptime at a predictable cost. These packages provide your system with the care it needs to operate most efficiently while minimizing downtime.

Packages (*)	Advantage Plus	Advantage Prime	Advantage Ultra
Annual preventive maintenance visit	√	√	√
Next Business Day on-site response[1]	√	√	√
Remote monitoring service	√	√	√
Technical support	√	√	√
Parts[2]	Discounted rates	Discounted rates	All included!
Labour and Travel	Standard rates	All included!	All included!

(1) Upgrades to an eight-hour or four-hour on-site response time and upgrate to 24/7 preventive maintenance service may be selected where available. (2) Batteries and proactive replacement of parts not included

(*) Only valid on Smart-UPS, Galaxy, Symmetra, Epsilon and AccuSine range

And experience total peace of mind with the most comprehensive service.

Key figures

- 170-year history of service culture
- 1,200 Field Service Engineers
- 170 service centers in 100 countries
- 90 service provider partners worldwide
- 6 regional service centers
- 49 rapid deployment centers
- 100M+ combined man/hours of field service experience

To learn more about Schneider Electric solutions visit **www.schneider-electric.com**
Try our FREE, web-based applications to experiment with virtualization, efficiency and more at **tools.apc.com**

Make the most of your energy℠

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