# Secure Power Solution Product Guide – North America 2012 – 2013





# 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

#### **Availability**

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

cooling systems offer you 3 key benefits including:

# What can Schneider Flectric 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 power solutions

### **Our expertise** is right there for you:

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

#### 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

- and implementation of global secure
- Customized services for mission-critical applications that can be implemented at any stage in your life cycle.

# 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, guality and performance
- Enhanced safety for people, systems and equipment
- Energy savings and operating cost reductions

# An unrivaled range of products

An extensive catalog of options and extensions

An outstanding architectural design and implementation capability

# From "off-the-shelf" products to sophisticated customized solutions

### **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<sup>™</sup> 0.75 to 5 kVA / p. 9
- > Smart-UPS On-line<sup>™</sup> 1 to 20 kVA / p. 9
- > Symmetra 2 to 16 kVA / p. 9

#### Power quality products

> MGE Epsilon STS Static Transfer Switch 200 to 600 kVA / p. 23



Three-phase UPS

- > MGE Galaxy 3500 3:3 10 to 40 kVA / p. 11
- > MGE Galaxy 4000 3:3 40 to 75 kVA / p. 11
- > MGE Galaxy 5000 3:3 40 to 130 kVA / p. 12
- > MGE Galaxy PW 3:3 150 to 225 kVA / p. 12
- > MGE ESP 7000 3:3 300 to 500 kVA / p. 13
- > MGE ESP 8000 3:3 555 to 1100 kVA / p. 13
- > Symmetra MW 400 to 1600 kVA / p. 13

#### Application specific

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





- > Smart-UPS On-line Marine 1 to 6 kVA / p. 17
- > MGE Galaxy 5000 Marine 3:3 20 to 120 kVA / p. 17
- > Industrial Control Panel mount UPS 500 VA / p. 23

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



- > GUTOR MXW Inverter 48 to 220 VDC / p. 19
  - 24 to 220 VDC / p. 19
  - > GUTOR PXP 3:1 5 to 160 kVA / p. 20
  - 5 to 160 kVA / p. 20
  - > GUTOR PEW 3:1 5 to 200 kVA / p. 20
- 10 to 220 kVA / p. 20
- 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





> GUTOR MXP modular UPS and MDC rectifier 24 to 220 VDC / p. 19

> GUTOR MDD DC/DC Converter

> GUTOR PXP 3:3

> GUTOR PDW 3:3

> GUTOR SDC rectifier

Involving architectural solutions

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 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.

		Solution	Power Range	Page	Food&n.	Mater 3	Airborts	Health <sub>Can</sub>	Semicondu.	Manutactor Manutacturia industr	Marine & Mar	// /	Power S Gener S	Wind Farrow	Mining 55	Iransport	Data Con	Autom.	<sup>com</sup> otive
		Smart-UPS	0.75 to 5 KVA	9	•	•	•	•	•	•						•	•	•	Ĩ
Single-phase UPS		Smart-UPS On-Line	1 to 20 KVA	9	•	•	•	•	•	•						•	•	•	
		Symmetra	2 to 16 KVA	9	•	•	•	•	•	•						•	•	•	
	11	MGE GALAXY 3500 3:3	10 to 40 KVA	11	•	•	•	•	•	•					•	•	•	•	1
	14 - C	MGE GALAXY 4000 3:3	40 TO 75 KVA	11	•	•	•	•	•	•					•	•	•	•	
		MGE GALAXY 5000 3:3	40 TO 130 KVA	12	•	•	•	•	•	•					•	•	•	•	
Three-phase UPS		MGE GALAXY PW 3:3	150 TO 225 KVA	12	•	•	•	•	•	•					•	•	•	•	
	11 - 12 13 - 12 14 - 12 15 - 10 10	MGE ESP 7000 3:3	300 TO 500 KVA	13	•	•	•	•	•	•					•	•	•	•	
	日本 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	MGE ESP 8000 3:3	555 TO 1100 KVA	13	•	•	•	•	•	•					•	•	•	•	
	10000111	SYMMETRA MW	400 TO 1600 KVA	13	•	•	•	•	•	•					•	•	•	•	
		Symmetra PX - Data Center	10 to 500 KW	15											•		•		
	2	Galaxy 5000 - 3-Phase UL924 UPS for Emergency Lig	ghting	12	•	•	•	•	•	•					•	•	•	•	
Application specific	~	Smart-UPS On-Line Marine	1 to 6 KVA	17							•					•			
	U	MGE Galaxy 5000 Marine 3:3	20 to 120 KVA	17				l			•								
		Industrial Control Panel Mount Ups	500 VA	23	•	•	•		•	•		•	•		•	•	•	•	
	1000	GUTOR MXP Modular UPS and MXW inverter	48 to 220 VDC	19				ĺ			O/Shore	•	•			•			
	14 12	GUTOR MDC Rectifier and MDD DC/DC converter	24 to 220 VDC	19							O/Shore	•	•			•			
Fully customized	AN EX	GUTOR PXP 3:1 and 3:3	5 to 160 KVA	20				ĺ			O/Shore	•	•		•	•			
solutions	··· .	GUTOR PxW AC UPS single-phase output	5 to 200 KVA	20							O/Shore	•	•						
(GUTOR)	and the second s	GUTOR PxW AC UPS three-phase output	10 to 220 KVA	20				ĺ			O/Shore	•	•						
(GUTOR)	1. J	GUTOR SDC Rectifier	5 to 200 KW	21							O/Shore	•	•						
		GUTOR Inverter WxW 1-phase output	5 to 200 KVA	21				1			O/Shore	•	•						
	*********	GUTOR Inverter WxW 3-phase output	10 to 220 KVA	21							O/Shore	•	•						
Power quality products		MGE Epsilon STS – Static Transfer Switch	200 TO 600 KVA	23	•	•	•	•	•	•	•	•	•	•	•	•	•	•	

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.

# 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

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

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

# 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:

- extremely precise output voltage regulation
- internal bypass
- input power factor correction

PowerChute Business Edition software provides UPS management, safe system shutdown and

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 easyto-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.

				Single-	phase output units utiliz	ing line interactive topol	ogy, with sine wave outpu	
Designation		SMT750	SMT1000	SMT1500	SMT2200	SMT3000	SUA5000RMT5U	
Power/Runtime (VA / W / min)	/50/500/5		1000 / 700 / 6	1500 / 1000 / 7	2200 / 1980 / 9	3000 / 2700 / 5	5000 / 4000 / 9	
Extension Batt	ery Pack							
Management and control car	Management SmartSlot							
SmartSlot								
Management s	Management software PowerChute Business Edition (PCBE)						PCBE	
Serial comms.					DB9 or USB			
Input connection	on	NEMA	5-15P	NEMA 5-15P	NEMA 5-20P	NEMA L5-30P	NEMA L6-30P	
Nominal Input	/oltage	120V	120V	120 V	120 V	120 V	208 V	
Output	Туре	NEMA 5-15R	NEMA 5-15R	NEMA 5-15R	NEMA 5-20R / 5-15R	NEMA 5-15R / 5-20R	NEMA L6-20R / L6-30R	
connections	Quantity	(min 6)	(min 8)	(min 8)	(8) 5-15R,	(2) 5-20R	(min 2)	
Nominal Outpu	t Voltage			120	) V			
Physical Chara	cteristics (HxW	xD) mm / Unit weight kg						
Tower 6.34x5.43x14.29 / 29			8.62x6.73x17.28 / 42	8.62x6.73x17.28 / 53 17x7.7x21.42 / 11		17x7.7x21.42 /116	8.75x19x26 / 215	
Consifiered		1 21.1.1						

Specific rack mount versions are also availab

Exter	nded	rur

#### Smart-UPS 0.75 to 5 kVA

**Smart-UPS** 

Symmetra

2 to 16 kVA

**On-Line** 1 to 20 kVA

Designation	SMX750	SMX1000	SMX1500 RMI2U	SMX2200 RMHV2U	SMX3000 RMLV2U	SMX3000 RMHV2UNC	SUA2200XL	SUA3000XL	SUM1500 RMXL2U	SUM3000 RMXL2U	
Power/Runtime (VA /	750 / 600 /	1000 / 800 /	1500 / 1200 /	2200 / 1980 / 10	3000 / 2700 /	3000 / 2700	2200 / 1850 /	3000 / 2700 /	1440 / 1425 /	3000 / 2850 / 3.5	
W / min) (Full load)	14	8	6	220071980710	6	/ 6	10	5	12	50007205075.5	
Management and control cards	SmartSlot								AP9631 Fitted		
Management software	PCBE										
Serial comms.	RJ45, USB DB9 RS-232 or USB							DB9 RS-232			
Input connection		NEMA 5-15P		N	EMA L5-30P	NEMA 5-20P	NEMA 5-30P	NEMA 5-15P	NEMA 5-30P		
Nominal Input Voltage					12	0 V					
Output Type		NEMA 5-15R		NEMA 5-15R / 5-20R	A 5-15R / 5-20R NEMA 5-15R/5-20R/L5-30R			5R / 5-20R	NEMA 5-15R	NEMA 5-15R/5-20R	
connections Quantity		(min 8)		(6) 5-15, (2) 5-20	(3)5-15 (3)5-	20 (1) L5-30	(9) 5-15	(2) 5-20	(min 8)	(6) 5-15 (2) 5-20	
Nominal Output Voltage					12	0 V					
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	17x3.5x19.3 / 48.5	17x3.5x19.3 / 50.3	3.5x17x19.3 / 54.6	3.36x17x26.26 / 84.6	3.36x17x26.26 / 84.6	3.36x17x26.26 / 84.6	17.5x8.7x19.5 / 137	17.5x8.7x19.5 / 140	3.4x17x26.7 / 103	3.4x17x26.7 / 103	

Designation		SURTA1500 RMXL2U	SURT2200 RMXL2U	SURTD3K RMXL3U-TF5	SURTD5000 XLT-1TFF3	SURT6K RMXL3U-TF5	SURT8K RMXL6U-TF5	SURT10K RMXL6U-TF5	SURT15K RMXLT-1TF10K			
Power/Runtime (VA / W / min) (Full load)		1500 / 1050 / 12	2200 / 1600 / 6	3000 / 2100 / 14.1	5000/3500/6.3	6000 / 4200 / 5.3	8000/6400/73	10000 / 8000 / 4.8	15000 / 12000 / 8.3			
Management an	d control cards	Sn	nartSlot, DB-9, US	SB	AP9631							
Management so	ftware		PowerChute Business Edition (PCBE)									
Serial comms.		DE	39	RJ	45		DB9, Sr	nartSlot				
Input connection		NEMA 5-15P	NEMA 5-20P	NEMA L6-30P	NEMA L6-30P		Hard Wire (HW) (2PH+G)	Hard Wire (2PH+G)	(HW) NEMA 5-20R L6-20R / L6-30R			
Nominal Input Vo	oltage		120 V				208 V		,			
	Туре	NEMA	5-15R	NEMA	5-20R/ L6-20R /L	_6-30R	HW, NEMA 5-20R / L6-20R / L6-30R					
Output connections	Quantity	(6) 5	-15R	(12) 5-20 (2) L620 (1) L6-30			(1) HW,(12 5-20) (2) L6-20 (1) L6-30	(24) 5-20 (2) L6-20 (1) L6-30R	(1) HW (12) 5-20 (4) L6-20 (1) L6-30			
Nominal Output	Voltage	120	) V	120 / 208 V								
Physical Charact	eristics* (HxWx	D) mm / Unit weigh	it kg	*according to p	ohysical arrangen	nent need to be c	completed with re	eferences below				
Tower SURTxxxx	XLI											
Rack SURTxxxxRMXLI		3.35x17x22 / 60.5	3.35x17x22 / 60.5	8.6x19x26 / 221	17x10.2x26 / 245	8.6x17x26 / 221	13.85x17x28.98 /345	17.35×17×28×98 / 440	24.48x17x30.43 / 640			

APC reference SYH2k SYH4K6 6RMT RMT-P1			SYH4K6 RMT-P1	SYA4k8P	SYA8k8P	SYA4k 8RMP	SYA8k 8RMP	SYA8k 16P	SYA12k 16P	SYA16k 16P	SYA8k 16RMP	SYA12k 16RMP	SYA16k 16RMP	
Power/Runtime 2/1.4 4/2.8			4/2.8	4/3.2	8/6.4	4/3.2	8 / 6.4	8/ 6.4	12 / 9.6	16 / 12.8	8/6.4	12 / 9.6	16 / 12.8	
(kVA / kW / min)	(Full load)	12.6	12.5	6	7,6	6	6	6	6	6	6	6	6	
Management an	d control cards			AP9631 Fitted										
Anagement so	ftware			PowerChute Network Shutdown (PCNS)										
Serial comms.				DB9										
Input connection Hard Wire NEMA L6-30P				Hard Wire (2PH+N+G)										
Nominal Input Voltage							20	8 V						
Output	Туре	NEMA L6-20R / L6-30R		Hard Wi	re 4-wire		ard Wire, NEMA 14-30R/L5-20R Hard Wire				Hard Wire NEMA L14-30R / L5-20R			
connections	Quantity	(2) L6-20	(2) L6-30	(min 1) (1)HW (2PH+N+G) (2) L14-30R (4) L5-20R				(1)	HW (2PH+N	+H)	HW (2PH+N+G) (4) L14-30R (8) L5-20R			
Nominal Output	Voltage		120 V, 208 V											
Tower ( T ) / Racl (Rack space)	(R)	R (8U)	R (10)	-	T R (13U) T			R (19U)						
Physical Charact (height x width)		14x19	17.5x19	26.42x19	26.42x19	5x18.6	22.5x18.6	36.9x19	36.9x19	36.9×19	32.9x18.6	32.9x18.6	32.9×18.6	
Depth mm / weight kg 28.75 /		28.75 / 164	28.75 / 324	28.6 / 347	28.6 / 444	27.1 / 295	27.1 / 392	28.6 / 483	28.6 / 580	28.6 / 677	27.1 / 437	27.1 / 534	27.1 / 631	

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

#### n single-phase output units utilizing line interactive topology, with sine wave output and runtime expansion

# 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

and provides the widest range of standard and adaptable three-phase products. The adapted products are designed

Mechanical UPS modifications: impact of specific

Environmental adaptation. Batteries with long

### Core offer

Our Three-phase UPS Range offers state-of-the-

Availability: integrated maintenance bypass,

Adaptability: scalable power through parallel capacity.

Performance: low-input harmonics and high-

### Many options are available

#### MGE Galaxy 3500 3:3

10/15/20/30/40 kVA

#### APPLICATIONS

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

#### CHARACTERISTICS

3:3 - 10, 15, 20, 30 kVA

Power ratings

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	94% at 100% linear load (+ or5% )
Communication	Network SNMP and environmental monitoring (AP9631), supplied with the UPS
Input ratings	208 V-220V (3PH+N+G)
Output ratings	208 V
Warranty	1 year

#### FEATURES

- User-replaceable air filters
- Compact form factor. Reduced footprint
- Start-up Service Included
- > Dual mains input
- > Hot Swappable Batteries
- Input Power Factor Correction
- Sturdy 2mm front panel > IP 51 rating

#### OPTIONS

- > Matching External runtime frame with batteries
- > Single and parallel bypass panel floor-mounted
- For third-party batteries
- > Empty frame for third-party transformers > Seismic brackets
- User-replaceable air filters
- > Network management card (AP9635) with environmental monitoring, Modbus™, Teleservices

#### DIMENSIONS

UPS (Wide Tower) > HxWxD: 59 x 21 x 33 in Weight: 1181 lbs maximum UPS (Narrow Tower) > HxWxD: 59 x 14 x 33in Weight: 873 lbs maximum rnal runtime frame> HxWxD: 159x21x36.5 in Weight: 1707 lbs maximum

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#### MGE Galaxy 4000 3:3

30/40/60/80 kVA

#### APPLICATIONS

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

#### CHARACTERISTICS

40, 50, 60, 75 kVA

#### 0.8

Adjacent, remote, open rack, VRLA, wet cell

MIMIC LED display

90% at 100% linear load (+ or - .5%) RS232, RS485, network SNMP, dry contacts

208 V 3 phase 208 V 3 phase

1 year

#### FEATURES

- Fault tolerant circuitry
- > Online double conversion topology
- > Field upgradeable
- > Digital power quality
- > Lower input THD (<3%)
- > Extended run times available
- > Top or bottom entry
- Communication cards for every application

#### OPTIONS

- Internal or external maintenance bypass cabinet
- Matching 42 pole distribution
- Seismic brackets
- Line up and match battery cabinet and auxiliary cabinets
- > 65 kAIC rating
- Communication cards for every application

UPS > HxWxD: 72 x 34 x 36 in Weight: 1234 lbs maximum Empty battery cabinet > HxWxD: 72 x 34 x 34 in Weight: 2730 lbs maximum auxiliary cabinet > HxWxD: 72 x 20 x 34 in Weight: 330 lbs maximum



#### MGE Galaxy 5000 3:3

#### 40/50/60/80/100/130 kVA

	APPLICATIONS
	<ul> <li>Medium Data Centers</li> <li>Industrial Plants</li> <li>Telecommunication Centers</li> </ul>
	CHARACTERISTICS
Power ratings	40, 50, 60, 80, 100, 130 kVA
Input power factor	-
Parallel Capability	Up to 6 units for capacity or redundancy
Output power factor	0.9
Battery	Integrated, adjacent, remote, open rack, VRLA
Front display	Graphical display available in 18 languages
Efficiency	Up to 94% at 100% linear load (+ or5%)
Communication	RS232, RS485, network SNMP, dry contacts
Input rating	-
Input voltage	480 V (208 & 600 V with transformer)
Output voltage	408 V (208 & 600 V with transformer)
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
- P 32 pack
- Fan Redundancy
- External Synchro Board to be used with STS
- > Input/output transformers in matching cabinet
- > UL924 Rated battery cabinets (40, 50, 80, 100 kVA UPS)

UPS without batteries > HxWxD: 76 x 28 x 33 in Weight: 1168 lbs Empty Battery Cabinet > HxWxD: 75 x 28 x 32 in Weight: 881 lbs Empty Auxiliary Cabinet > HxWxD: 75 x 28 x 32 in

Weight: 297 lbs 12 www.schneider-electric.com



#### MGE Galaxy PW 3:3 150/180/200/225 kVA

#### APPLICATIONS

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

150, 180, 200, 225 kVA

Up to 4 units for capacity or redundancy

0.9

Open rack, VRLA, wet cell LCD with MIMIC LED display

93% at 100% linear load (+ or - .5%) RS232, RS485, network SNMP, dry contacts

208-600 V

208-600 V

1 Year

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

#### 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

UPS without batteries > HxWxD: 72 x 40 x 33 in Weight: 2640 lbs

Empty Battery Cabinet > HxWxD: 75 x 40 x 33 in Weight: 506 lbs Empty Auxiliary Cabinet > HxWxD: 75 x 40 x 33 in Weight: 287 lbs



#### MGE ESP 7000 3:3

300/400/500 kVA

#### Mission-critical environments Medium/large data centers

Industrial plants

### 300, 400, 500 kVA Yes

0.9 Lead-acid batteries (vented, sealed), NiCad User-friendly alphanumerical display Up to 94% (+ or - 5%) Dry contact, network management card

208 V to 600 V, three phase

#### 208, 480, 600 V +/- 0.5% 1 Year

#### FEATURES

#### Strong electrical features

- Intuitive monitoring
- > Parallel capable output
- > Synchronization to external source
- > High availability architecture components

#### OPTIONS

- > nput isolation transformer
- Output distribution
- > External maintenance bypass
- > Bottom cable entry
- > Remote alarm status panel > Seismic anchors
- > Graphical user interface with network connection Battery monitoring
- Continuous duty and momentary duty
- Static switch cabinets (SSC)
- Critical bus synchronization

#### UPS module > HxWxD: 69 x 82 x 39 in Weight: 6900 lbs

nce bypass cabinet > HxWxD: 22.75 x 82 x 39 ir Weight: 540 lbs

Transformer cabinet > HxWxD: 44.75 x 82 x 39 in Weight: 3600 lbs



> Large data centers

Industrial Facilities

0.9pF

Up to 93% (+/- 5%)

480 or 600 V

OPTIONS

Seismic anchors

Weight: 12200 lbs

Weight: 14000 lbs

Intuitive monitoring

1 Year



#### MGE ESP 8000 3:3 555/625/750/800/1000/1100 kVA

> Mission Critical Environments

555, 625, 750, 800, 1000, 1100 kVA

Up to 6 modules (1100kVA)

Lead-acid batteries (vented, sealed), Ni-Cad User friendly alphanumerical display

Dry contact, network management card, SNMP

480 or 600 V, three phase

> Strong electrical features

Parallel capable output Synchronization to external source

High availability architecture components

#### Battery monitoring systems Batteries cabinets (with VRLA batteries) standard offering Flooded cells / rack • Output distribution (customized) Top cable entry cabinet

Critical bus synchronization System static bypass switch cabinet

#### DIMENSIONS WITHOUT BATTERY

#### Single Module-Top entry:

555/500, 625/562 > HxWxD: 121 x 82 x 39 in

750/675, 800/720 > HxWxD: 135 x 82 x 39 in



#### Symmetra MW 3:3

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

#### APPLICATIONS

> Mission-critical environments

> Medium/large data centers, buildings, or facilities

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

#### Unity

Unity (kVA=kW)

Valve-regulated lead acid, vented lead-acid, nickel cadmium, lithium ion

Up to 9 UPSs for 14.4MW of capacity or redundancy Touch screen LCD display

>97%

Touch screen LCD display

480 V 3-phase + N + G

480 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
- Start-up 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
- JPSync™ module

#### DIMENSIONS WITHOUT BATTERY

555/500, 625/562 > HxWxD: 80 x 83 x 42 in Weight: 4669 lbs 750/675, 800/720 > HxWxD: 80 x 216 x 42 in Weight: 14028 lbs

# **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 20 kW All-in-One

	10/20 kVA
	APPLICATIONS
	<ul> <li>&gt; Data closets</li> <li>&gt; Small data centers</li> <li>&gt; High-density zones</li> </ul>
	CHARACTERISTICS
5	10 and 20 kW N+0 or N+1 kVA
r factor	Unity (kVA=kW)
	Valve-regulated lead-acid
oility	None
	PowerView Local Display
	91.5%
ion	UPS Network Management Card (AP9617) included
•	208 V, 3-phase + N + G
ge	208 V, 3-phase + N + G or 3P + G
	1 year
	FEATURES
	> Single-rack design
	<ul> <li>Configurable power distribution</li> </ul>
	<ul> <li>Redundant intelligence module</li> </ul>
	<ul> <li>Hot-swappable power modules</li> </ul>
	I share a second s

Power ratings Output powe Battery

Parallel capab

Front display Efficiency

Communicati

Input voltage

Output voltage Warranty

HxWxD

Weight

- > Hot-scalable batteries Front access only
- Maintenance bypass panel
- > Dual mains input, top or bottom feed
- > Start-up service included
- Network-manageable

#### OPTIONS

- Extended runtime battery frames Secondary Network Management Card (HTTP/Telnet/SNMP)
- > Configurable power accessories

DIMENSIONS
81.5 x 23.5 x 35.5 in
665 lbs (without batteries or power modules) 1803 lbs (fully populated with batteries and power modules)





#### Symmetra PX 40 kW

#### 10/20/30/40 kVA

#### APPLICATIONS

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

#### CHARACTERISTICS

10 to 40 kW, in 10 kW increments

Valve-regulated lead-acid

None 91.5%

PowerView Local Display

UPS Network Management Card (AP9630)

208 V 3-phase + N + G

120/308 V 3-phase + N + G

1 year

#### FEATURES

- Single rack design
- > Hot-scalable power modules
- > Hot-swappable batteries
- Bottom feed
- > Start-up service included
- > Redundant intelligence module
- Network-manageable

#### OPTIONS

- Extended runtime battery frame
- Maintenance bypass panel
- Isolation transformer
- Batterv breaker box
- > Configurable power distribution units
- > Secondary network management card (HTTP/telnet/SNMP)

#### DIMENSIONS

82 x 36 x 24 in

600 lbs (40 kW UPS, without batteries) 1700 lbs (40W UPS, with 6-min runtime)

### Scalable offer for Data centers

### Marine



#### Symmetra PX 100 kW

#### 10/20/30/40/50/60/70/80/90/100 kVA

#### APPLICATIONS

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

#### CHARACTERISTICS

10 to 100 kW, in 10 kW increments Valve-regulated lead acid None PowerView Local Display 92.5% UPS network management card (embedded) 208 V 3 phase + N + G 120 V/208 V 3 phase + N + G

#### 1 year FEATURES

- > Hot-scalable power modules
- > Hot-swappable batteries (5 to 8-year life)
- > Unity power factor corrected
- > Dual mains input, top feed
- Start-up service included
- > Hot-swappable Redundant intelligence module
- >Network-manageable
- Redundant intelligence module
- > Fault-tolerant N+1 design

#### OPTIONS

- > Extended runtime battery frames
- > 300 mm bottom feed frame
- Modular power distribution units with maintenance bypass and fully rated subfeed breaker (600:208 V, 480:208 V, 208:208 V, and Transformerless 208 V)

	DIMENSIONS
łxWxD	79.1 x 47.2 x 42.1 in
Veight	Without batteries: 1436 lbs With 5-min runtime: 4224 lbs



#### Symmetra PX 250/500 kW

25-500 kVA

#### APPLICATIONS

Medium/large data centers > Mission-critical environments

#### CHARACTERISTICS One UPS: 25 kVA to 500 kVA, in 25 kVA increments. Fully populated parallel system: 25 kVA to 2 MVA, in 25 kVA increments Valve-regulated lead acid Up to 4 UPSs, for capacity or redundancy Localized 25.4 cm touch screen display 96% UPS network management card (AP9635) included

380/400/415/480 V, 3-phase + N + G 380/400/415/480 V, 3-phase + N + G

#### FEATURES

1 year

- > Hot-scalable power modules
- > Hot-swappable batteries (5 to 8-year life)
- > Unity power factor corrected
- > Dual mains input, top or bottom feed
- Start-up 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-management

#### OPTIONS

- Third-party battery cabinets
- > Extended runtime battery frames
- > Battery breaker enclosure
- Maintenance bypass with distribution cabinet (MBwD)
- Battery sidecar
- Bottom feed frame
- Modular power distribution

#### DIMENSIONS

Without batteries: 78.74 x 70.87 x 42.13 in 6-min runtime: 78.74 x 205 x 42.13 in Without batteries: 3797 lbs 6-min runtime: 18377 lbs



#### Smart-UPS On-Line Marine

#### 1 to 6 kVA

	SURT 1000XLIM	SURTD 2200XLIM	SURTD 3000XLIM	SURT 6000XLIM		
		C SUPPLY IN		0000XEII I		
Power Capacity	1000VA (700W)	2200VA (1540W)	3000VA (2100W)	6000VA (4200W)		
Input Voltage (default 230V)		220, 23	i0, 240V			
Input Voltage Range Full Load, t ≤ 40°C )		160V t	o 280V			
Input Voltage Range (Half Load, t ≤ 40°C)		100V t	o 280V			
Input Voltage Range (Full Load, t= 55°C)		180V t	o 280V			
Input Voltage Range (Half Load, t= 55°C)		112.5V t	to 280V			
Input mains 1 and main 2			-			
Input Frequency Range		45Hz	- 65Hz			
Input Connection	IEC 320 C14	IEC 320 C14	IEC 320 C20	Hardwire (H, N,G)		
Output Voltage Regulation		+/-	- 1%			
Output Frequency	50/60Hz +/- 3%					
Efficiency	88%	90%	91%	92%		
Output Connections	(6) IEC	320 C13				
	(2) IEC	(2) IEC Jumpers	(2) IEC 320 C19	(2) IEC 320 C19		
Internal bypass	Jumpers	(8) IEC 320 C 19	(2) IEC Jumpers	(2) IEC Jumpers		
	BATTERIES	<b>S RUNTIME</b>				
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 85 483	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 Filter1 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

Power ratings

Battery

Output power factor

Parallel capability

Communication

Input voltage

Warranty

Output voltage

Front display

Efficiency



### MGE Galaxy 5000 Marine

20 to 120 kVA

	20/16 30/24 40/32	60/48 80/64	100/80 120/96
	NORMAL AC SUPPL		
Input voltage range (V)		to 470 3 phase	S
Input mains 1 and main 2		ate or common	
Frequency	50Hz,	60Hz +/- 8 Hz	
Input power factor		> 0.99	
Input current total harmonic distortion (THDI)		< 3%	
	BYPASS SYSTEM IN	IPUT	
Nominal input voltage		V 3 phases + ne	eutral
Frequency		60Hz +/- 8 Hz	
	Ουτρυτ		
Output voltage range (V)	380V - 400V - 415V -	440V +/-3% 3 pł	nases + neutral
Frequency	5	0Hz/60Hz	
Voltage regulation		+/- 1%	
Overload	150% 1 minu	ute, 125% 10 mir	nutes
Output voltage total harmonic distortion	Tł	HD(U) < 2%	
Max load crest factor		3:1	
	OVERALL EFFICIEN	ICY	
Double conversion mode	l	ıp to 94%	
Economy mode	ι	up to 97%	
	ENVIRONMENTAL		
Storage temperature	- 25°C to + 45°C		
Operating temperature	up t	o + 40°C (2)	
Operating altitude		1000 m	
	PARALLEL-CONNE	стіон	
Modular	up to 6 modules		
	STANDARD AND A	PROVALS	
Performance and safety	IEC/EN 620	40-1, IEC/EN 60	)950
Performance and design	IEC/EN 62040-3		
Design and manufacturing	ISO 14001, I	SO 9001, IEC 6	0146
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 acco E-10 rules and	d classification
	UPS DIMENSIONS		
	mm height = 2260)	WEIGHTS	(depth = 850
UPS without batteries width (mm)	710		
Weight	500	60	10
weight	BATTERY DIMENSI		
		ONS AND WEI	GHTS(depth=
10 min autonom width	850 mm height = 2260) 710		1010
10 min autonomy width (mm)	1000		1400 1500
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...



	48V	110V	125V	220V
	Input			
Voltage*		230\	/AC	
Allowable tolerance		+/- 2	20%	
Current (per module)		12.9	AAC	
Power factor		>0.99 @ outpu	t 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*		230'	/AC	
Tolerance	+/- 0.5%			
Adjustable range	200-242VDC			
Current (per module)	9.8AAC @ cos ¥ 0.8			
Efficiency	> 85%			



	24V	48V	110V	125V	220V
	Input				
Voltage*			230VAC		
Allowable tolerance			+/- 20%		
Current (per module)	5.8AAC		12.9	AAC	
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%		

**MDC** Rectifier 24/48/110/125/220 VDC

TEN		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*		230	VAC	
	Voltage range		+/-	0.5%	
GUTOR	Adjustable range		200-2	242VDC	
	Current (per module)		9.8AAC @	© cos Ψ 0.8	
1XW Inverter	Efficiency		>9	0%	

8	/11	0/	125	/220	C



	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%		

24/48/110/125/220 VDC

\* 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

Туре	PXP 1000 single-phase output
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 × 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 SDC Rectifier**

Туре	
Ratings	24-220 V
Operating temperature	
Allowable air humidity	
Noise level	
Communication	Мо
	Input
Rectifier	6-p
Voltage	3×3
Voltage tolerance	
	Output
Voltage	
DC current tolerance	
Efficiency	l
DC overcurrent capability	



# GUTOR PxW AC UPS single-phase output

5 - 200 kVA

Туре	PEW single-phase output			
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 WxW Inverter

Туре	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

5-200 kVA

Rectifier / Battery Charger				
	25-1200 A			
- 10 to + 40°C (max. 55°C on request)				
< 95% (non-condensing)				
55 – 65 dBA (depending on rating)				
10dbus TCP/IP,IEC 61850 (others on request)				
6-pulse thyristor bridge (12-pulse on request)				
x 380 / 400 / 415V (other voltages on request)				
+ 15 /	- 25%			
24/48/110/125/220 VDC				
+/-	2%			
Up to 94% (depending on configuration)				
150%	5/2s			



#### GUTOR WxW Inverter

#### 10-220 kVA

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%
< 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)
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)
Modbus TCP/IP,IEC 61850 (others on request)           Input           110/125/220/400 VDC           + 20 / - 15%           Output           380 / 400 / 415V (others on request)
Input 110/125/220/400 VDC + 20 / - 15% Output 380 / 400 / 415V (others on request)
110/125/220/400 VDC + 20 / - 15% Output 380 / 400 / 415V (others on request)
+ 20 / - 15% Output 380 / 400 / 415V (others on request)
Output 380 / 400 / 415V (others on request)
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
   Manageability
- Increased Availability

#### **MGE Epsilon STS**

200/400/600 kVA

#### APPLICATIONS

Industrial applications
 Data Centers
 Telecommunication

Power ratings

Front display

Communication

Nominal Voltage

Compensated

Efficiency

(linear load

Warranty

and PF=0.8)

harmonic currents

	CHARACTERISTICS					
	200, 400, 600 A					
	208, 220, 240, 440, 480, 575, 600 VAC (+/- 10% adj. up to +/- 15%)					
;						
	0.99					
	1 year					
	FEATURES					

- Minimizes space requirements
- Independent control boards, dual cooling systems and power supplies
- Test 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

#### **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 x 72 x 25 in
   Weight: Weight: 910 lbs
   HxWxD: 30 x 72 x 39 in
- Weight: 1375 lbs



### Industrial Control Panel mount UPS

500 VA

Designation	SUA500PDR-S	SUA500PDR-	H SUA500PDRI-S	SUA500PDRI-H		
Power	500 VA / 325W					
Extension Battery Pack	N/A					
Management and control cards	SmartSlot – optional network management, modbus, relay I/O					
Serial comms	DB9, UPS Status					
Input connection	HardWire (3-wire, H-N-G)					
Nominal Input Voltage	120 V	120 V	230 V	230 V		
Output Type	HardWire					
Connections Quantity	(3-wire, H-N-G)					
Nominal Output Voltage	120 V	120 V	230 V	230 V		
	PHYSICAL CHARACTERISTICS (HxWxD)					
Panel mount		5.84 x 14.24	x 7.72 in / 18 lbs			
Faller Hount						
	APPLICATIONS					
	<ul> <li>Manufacturing Equipment</li> </ul>		<ul> <li>Automation Control</li> </ul>			
	<ul> <li>Material and Packaging handling</li> </ul>		> IP-based Devices			
	SEGMENTS					
	> Food and Beverage		> Power Generation			
	> Water		> Mining			
	> Airports		<ul> <li>Transportation</li> </ul>			
	<ul> <li>Semiconductor plant</li> </ul>		> Data Centers			
	<ul> <li>Manufacturing Industry</li> </ul>		<ul> <li>Automotive</li> </ul>			
	> Oil and gas					
	BENEFITS					
	<ul> <li>Industrial Panel or DIN Rail Mountable</li> </ul>		> APC SmartSlot			
			> LED Status Indicators			
	<ul> <li>Hardwired Input</li> </ul>		<ul> <li>Audible Alarms</li> </ul>			
	<ul> <li>Internal or External Battery Installation</li> <li>Chassis knockout</li> <li>Integrated Dry Contact I/O</li> </ul>		<ul> <li>&gt; User-Replaceable Batteries</li> <li>&gt; Hot-Swappable Batteries</li> <li>&gt; Temperature-Compensated Battery Charging</li> </ul>			
	> DB-9 Serial Port	,	<ul> <li>Automatic Self-</li> </ul>	-		
	Communications	5	2 Automatic Sell-			

# **Energy management**

«StruxureWare<sup>™</sup> 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<sup>™</sup> software within EcoStruxure<sup>™</sup> 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

IPv4/IPv6

- Web server and e-mail notification
- Network Shutdown
- InfraStruxure
- Central compatible
- SNMPv1/SNMPv3
- Alarm, event
- and data logsEvent log stores
- up to 500 events I
- Remote access
- from any computer

### 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.

Software: 3 Levels and 7 Functions







Control «I Control our facilities processes» Remote monitoring modem
Modbus RS485 (AP9635 only)
Notify up to 50 computers of the UPS, chiller and air-conditioning unit status





# **Cooling Solutions**

# Precision air conditioning units

### Cooling: an extensive high-performance range

With its unrivaled extensive range of cooling units 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
- Indirect Air Economization provides huge energy savings for minimizing the value Power Utilization Effectiveness (PUE)

# Perfect connectivity for your global architecture

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.

### Uniflair Precision Air Conditioning Units



Perimetral cooling				
r	UniFlair LE Direct Expansion (DX)			
	15 - 100			
	Direct Expansion			
:	Small / Medium / Large			
208-230 / 3 / 60 and 460 / 3 / 60				
Downflow - Upflow				
	3,500 - 12,600			
Electronically Commutated (EC)				
Indoor				

# **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)

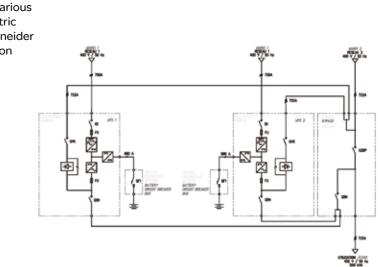
### Pre-qualified electrical distribution architecture integrating secure power solutions

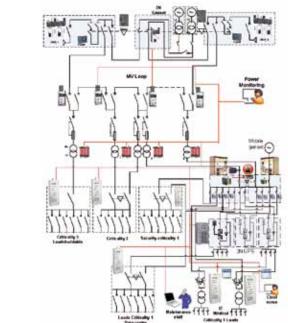
Schneider Electric is able to provide you with specific, pre-qualified power architectures for many different industries: Healthcare, Water and Waste treatment, Onshore connection...

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.

#### 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

#### **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	$\checkmark$	$\checkmark$	$\checkmark$
Next Business Day on-site response <sup>1</sup>	$\checkmark$	$\checkmark$	$\checkmark$
Remote monitoring service	$\checkmark$	$\checkmark$	$\checkmark$
Technical support	$\checkmark$	$\checkmark$	$\checkmark$
Parts <sup>2</sup>	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

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 energysm

APC by Schneider Electric

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