

ON-LINE UPS
CHALLENGER SERIES
1 KVA, 2 KVA, 3 KVA

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FEATURES:

- Stand alone and rack-mount UPS
- True on-line double conversion technology
- Wide-input voltage range for harsh environments
- Input Power Factor correction 0.99
- Output power factor 0.9
- IGBT PWM rectifier & inverter technology
- Automatic bypass for fault tolerance
- Frequency converter mode
- Energy-saving, ECO mode operation
- Generator compatible
- Friendly LCD Display
- Selectable output voltage via LCD panel
- Multiple communication ports: USB/ RS-232 and SNMP (optional)

BENEFITS:

- High uptime
- High efficiency, energy-saving ECO mode
- Extends battery lifespan
- Microprocessor control optimizes reliability
- Ease of maintenance
- User-friendly and programmable



True on-line double conversion technology

A true on-line double conversion UPS is a unit where the inverter is always ON. Therefore, it provides clean, high-level quality power to protect mission-critical applications such as servers, sensitive networks, data centers, telecom devices, medical equipment, and industrial processes.

Wide-input voltage range for harsh environments

The UPS provides stable power to connected devices even under unstable electrical environments. Please refer to individual product specifications for detailed information.

Frequency converter mode

The UPS can be used as frequency converter from 50 Hz input to 60 Hz output, or from 60 Hz input to 50 Hz output to suit the requirements of power-sensitive equipment.

Energy-saving ECO mode operation

ECO mode is designed to offer high efficiency reducing energy usage and cost. The UPS powers the load via its static bypass while returning to on-line double conversion mode on a timely manner when needed.

Generator Compatible:

The UPS through its robust IGBT rectifier has full compatibility with generators and ensures clean and uninterrupted power to the loads.

Multiple communication ports: USB/ RS-232 and SNMP (optional)

The UPS units employ a wide range of advanced communication protocols (USB, RS-232, and SNMP), which provide remote management capabilities over the network and enable centralized management.

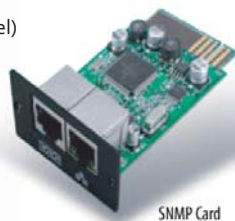
LCD Display Panel

- Remaining backup time information
- Configuration and Fault information
- Mute operation
- Output & Battery voltage information
- Load information
- Mode operation information
- Battery information
- Input & Battery voltage information



Optional SNMP (Integrated with specialized software)

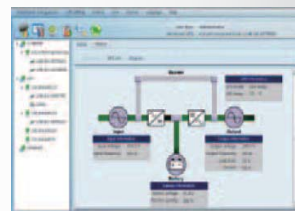
- Allows control and monitoring of multiple UPSs through RJ-45 network connection
- Real-time dynamic graphs of UPS data (voltage, frequency, load level, battery level)
- Warning notifications via audible alarm, broadcast, mobile messenger, e-mail and SNMP traps
- Historic data log stored in centralized PC database
- Simple firmware upgrade with one click
- Password security protection and remote access management
- Supports optional environmental monitoring detector for temperature, humidity and smoke
- Supports the following protocols: http, SNMP, SNMP V2



SNMP Card

Software UPS Management Software

- Allows control and monitoring of multiple UPSs via LAN and INTERNET
- User-friendly power analysis graphs
- Real-time dynamic graphs of UPS data
- Safely OS shutdown and protection from data loss during power failure
- Warning notifications via audible alarm, broadcast, mobile messenger, and e-mail
- Scheduled UPS on/off, battery test, programmable outlet control, and audible alarm control
- Password security protection and remote access management
- Supports multiple OS and local languages



CHALLENGER SERIES 1 KVA, 2 KVA, 3 KVA Stand Alone UPS Technical Specification

MODEL	SA1P1LVW o SA1P1HVW	SA1P2LVW o SA1P2HVW	SA1P3LVW o SA1P3HVW
Phase	Single phase with ground		
Capacity	1000 VA / 900 W	2000 VA / 1800 W	3000 VA / 2700 W
INPUT			
Nominal Voltage	100/110/115/120/127 VAC or 200/208/220/230/240 VAC		
Voltage Range	60-150 VAC or 120-300 VAC @ 50% load 90-140 VAC or 180-280 VAC @ 100% load		
Frequency Range	40-70 Hz (Selectable)		
Power Factor	≥ 0.99, Nominal Voltage (100% load)		
Rectifier	IGBT		
OUTPUT			
Output Voltage	100/110/115/120/127 VAC or 200/208/220/230/240 VAC		
Voltage Regulation	± 1%		
Frequency Range (Synchronized Range)	47 - 53 Hz or 57 - 63 Hz		
Frequency Range (Batt. Mode)	50/60 Hz ± 0.5 %		
Current Crest Ratio	3:1		
Harmonic Distortion (THDv)	Linear Load ≤ 3 % ; Non-linear Load ≤ 6 %		
Transfer Time	Zero (AC to DC) ; 4 ms (Inverter to Bypass)		
Waveform	Pure Sine Wave		
EFFICIENCY			
AC Mode	88%	89%	90%
Battery Mode	83%	85%	88%
BATTERY			
Battery Type	12V/9 Ah		
Numbers	2	4	6
Typical Recharge Time	4 hours recover to 90% capacity		
Charging Current	1.0 A		
Charging Voltage	27.4VDC ± 1%	54.7 VDC ±1%	82.1 VDC ±1%
INDICATORS			
LCD Display	Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicators		
ALARM			
Battery Mode	Sounding every 4 seconds		
Low Battery	Sounding every seconds		
Overload	Sounding twice every second		
Fault	Continuously sounding		
PHYSICAL			
Dimensions (DxWxH) (mm)	282 x 145 x 220	397 x 145 x 220	421 x 190 x 318
Net Weight (kg)	9,8	17	27,6
ENVIRONMENT			
Running Humidity & Temperature	20 - 90 % RH (Non-condensing) @ 0 - 40°C		
Noise Level	< 50 dB @ 1 meter		
MANAGEMENT			
Smart RS-232 /USB	Supports Windows® 2000/2003/XP/Vista/2008, Windows®7/8, Linux, Unix and MAC		
Optional SNMP	Power management from SNMP manager and web browser		
STANDARDS & CERTIFICATIONS			
Quality	ISO 9001 ; ISO 14001		
Compliance	EN62040-3 ; EN61000 ; EN62040-2:2006 ; EN62040-1: 2008 ; CE		

* Derate to 80% of capacity in Frequency converter mode and to 80% when the output voltage is adjusted to 100/200/208 VAC

Sy-G reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Sy-G products previously or subsequently sold.

CHALLENGER SERIES 1 KVA, 2 KVA, 3 KVA Rack Mount UPS Technical Specification

MODEL	RM1P1LVW / RM1P1HVW	RM1P2LVW / RM1P2HVW	RM1P3LVW / RM1P3HVW
Phase	Single phase with ground		
Capacity	1000 VA / 900 W	2000 VA / 1800 W	3000 VA / 2700 W
INPUT			
Nominal Voltage	100/110/115/120/127 VAC or 200/208/220/230/240 VAC		
Voltage Range	At 50% load: 120-300 VAC or 60-145 VAC		
	At 100% load: 180-280 VAC or 90-145 VAC		
Power Factor	≥ 0.99, Nominal Voltage (100% load)		
Frequency Range	40-70 Hz (Selectable)		
Rectifier	IGBT		
OUTPUT			
Output Voltage	100/110/115/120/127 VAC or 200/208/220/230/240 VAC		
Voltage Regulation	± 1%		
Frequency Range (Synchronized Range)	47 - 53 Hz or 57 - 63 Hz		
Frequency Range (Batt. Mode)	50 Hz ± 0.25 Hz or 60 Hz ± 0.3 Hz		
Current Crest Ratio	3:1		
Harmonic Distortion (THDv)	Linear Load ≤ 3 % ; Non-linear Load ≤ 6 %		
Transfer Time	Zero (AC to DC) ; 4 ms (Inverter to Bypass)		
Waveform	Pure Sine Wave		
EFFICIENCY			
AC Mode	88%	89%	90%
Battery Mode	83%	87%	88%
BATTERY			
Battery Type	12V/ 9 Ah		
Numbers	2	4	6
Typical Recharge Time	4 hours recover to 90% capacity		
Charging Current	1.0 A		
Charging Voltage	27.4VDC ± 1%	54.7 VDC ±1%	82.1 VDC ±1%
INDICATORS			
LCD Display	UPS status, load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions		
ALARM			
Battery Mode	Sounding every 4 seconds		
Low Battery	Sounding every seconds		
Overload	Sounding twice every second		
Fault	Continuously sounding		
PHYSICAL			
Dimensions (DxWxH) (mm)	310 x 438 x 88	410 x 438 x 88	630 x 438 x 88
Net Weight (kg)	12	19	29.3
ENVIRONMENT			
Running Humidity & Temperature	20 - 90 % RH (Non-condensing) @ 0 - 40°C		
Noise Level	< 50 dB @ 1 meter		
MANAGEMENT			
Smart RS-232 /USB	Supports Windows® 2000/2003/XP/Vista/2008, Windows®7/8, Linux, Unix and MAC		
Optional SNMP	Power management from SNMP manager and web browser		
STANDARDS & CERTIFICATIONS			
Quality	ISO 9001 ; ISO 14001		
Compliance	EN62040-3 ; EN61000 ; EN62040-2:2006 ; EN62040 -1: 2008 ; CE		

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Product specifications are subject to change without further notice.



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