

ONEAC Sinergy® S Series UPS (700 VA - 3000 VA): Protecting key electronic equipment from power disruptions and inconsistencies will make a financial impact on your business systems. The Sinergy S Series Uninterruptible Power Supply (UPS) provides on-line double conversion technology to handle irregularities in the electrical system, to make brief power disruptions harmless, and to provide battery back-up to bridge prolonged power outages.

# Advanced technology for superior protection

Many electrical devices and systems respond to power line faults, such as voltage or frequency variations, short interruptions and outages, by malfunctioning. In the case of data processing systems, this often causes processing errors and data loss. Or in extreme cases, permanent software and hardware damage. Any of these situations can be costly to your business.

You can protect your devices and systems effectively against disruptions with the ONEAC Sinergy S Series UPS — in either tower or 19-inch rackmount configurations. Compact dimensions, low noise emissions and superior design mean the ONEAC Sinergy UPS can easily be integrated into most any working environment.



Sinergy S Series Rackmount (19" - 4 Post)



Sinergy S Series Tower

True on-line operation — load is decoupled from the AC power:

- Power failure bridged completely, without interruption
- · Consistently good quality of power to your equipment
- Safe operations of sensitive loads

Quality surge suppression or high performance filter protection:

- MOV Protection standard for general purpose protection
- Addition of optional FilterOne® provides superior common mode and normal mode protection (20 V/20 V) for 700 - 1000 VA models

Small, light, low noise emissions, modern office design:

- Problem-free installation
- · Plug and play

Integrated, automatic bypass:

• Automatically supplies utility power to loads in the event of UPS overload or fault.

Simple operation:

- · No operator control required while running
- · Clear indication of status and load by LEDs, as well as by acoustic alarms if faults occur

On-line protection for data, PCs and networks:

• Protects data and hardware from voltage fluctuations and power failure.

Computer interface:

Allows attached equipment to communicate with the UPS

Optional UPS communications software and accessories for intelligent responses during prolonged power failures:

- MopUPS®PROFESSIONAL
- Integration with SNMP networks using ManageUPS™NET for UPS monitoring
- · Integrates UPS and computer into one system
- · Configurable computer and multi-server shutdown
- · Compatible with all major operating systems

**Plug and play:** • Sinergy is ready for action. Just connect the UPS to the PC or network, plug it in and switch it on.

Safety approvals: • UL1778, cUL

**2-year warranty:** • Your best assurance of product quality and performance

## On-line topology

The Sinergy S Series UPS operates according to the on-line principle — connected loads are isolated from the irregularities of the AC power supply without interruption and supplied instead by the UPS.

The rectifier, which converts the AC voltage to DC voltage, supplies the inverter with power during normal operations. At the same time, the battery is maintained at full charge or is recharged if needed.

The inverter generates the sine-wave output AC voltage from the DC voltage. The AC voltage level and frequency are extremely stable.

Sinergy's double voltage-conversion decouples the load from the AC power supply and protects it from the following irregularities:

- · Voltage variations
- Frequency variations
- Overvoltage/Under-voltage
- Voltage peaks
- · Interference voltages
- Distorted voltage waveforms

If a short interruption or mains failure occurs, the battery supplies the inverter instantly and without interruption. When power is restored during battery operation, the changeover to normal operation also takes place without interruption.

As no switchover is necessary when power fails or is restored (on-line operation), this UPS ensures even sensitive loads can be operated safely and without problems. If severe or prolonged overloading occurs, the UPS automatically switches to the integrated bypass. The AC power at the UPS input is now available.

#### Sinergy Series is generator friendly

The true on-line double conversion topology easily supports as low as 1:1.3 generator applications with a 3:1 crest factor. Frequency and voltage regulation means that even older generator can be accommodated without problems.

Frequency auto-detection, coupled with an extremely broad input voltage tolerance window, allow for a wide variety of utility line variances without interfering in the UPS operation and support of your critical loads. Cascading circuit protection means that after an extended overload, the UPS will engage a self-protection sub-routine locking out the inverter & transferring the load to bypass source utilizing the appropriate feeder circuit protective device. Outstanding load and overload tolerances can be endured for minutes and hours, not seconds!

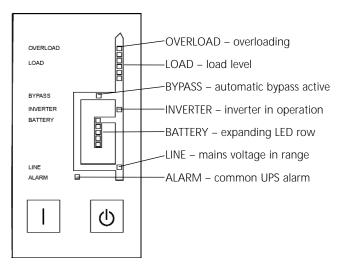
#### Scalable runtime

The runtime of all ONEAC Sinergy S Series UPSs, with the exception of the 700 VA model, can be expanded by adding batteries. Back-up times of several hours can be achieved in partial load operation.

## Comprehensive indicator and control panel

The comprehensive front panel LEDs provide a visual indication of the units' status at any given time:

All operational and load conditions are indicated by light emitting diodes (LEDs) on the front panel display. The UPS also sends an audible warning signal at 4 second intervals indicating critical operational conditions. The lower the battery reserve, the shorter the audible alarm interval. Allowing plenty of time to save your precious data



Front-panel indicator and control panel

#### Communications interface

All Sinergy S Series UPSs are equipped with an interface designed for communication with a computer when using ONEAC's optional MopUPS software. If the connected computer is informed of a power failure via the interface, it can shut down its programs and the operating system in a controlled and orderly manner within the battery's back-up time.

The computer/server requires an RS232 interface for communication with the UPS. Optional connectivity accessories include MopUPS software, available for all major operating systems and networks, and ManageUPSNET.

All Sinergy S Series UPSs are equipped with a combined interface COM port allowing serial communication when used with ONEAC MopUPS communications software. In combination with the additional UPS software, this serial interface enables a host of key monitoring functions.

# Protecting PCs and networks in a variety of applications

The ONEAC Sinergy Series UPS provides reliable support for:

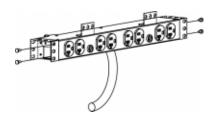
- Personal computers
- Workstations
- Servers and networks (LAN, WAN, etc.)
- Data processing equipment and systems
- · Computer centers
- Telecommunication systems
- ISDN systems
- · Medical imaging and diagnostic equipment
- Retail Point of Sale (POS) systems
- · Retail information systems
- · Air-traffic control systems

- · Business system machinery
- Safety systems in power stations
- · Broadcasting studios
- Transport systems
- Semiconductor test equipment
- Semiconductor manufacturers
- Process controls
- · Control centers/SCADA systems
- Drives in continuous production processes
- Production and automation systems
- · And more

#### Accessories for ONEAC Sinergy S Series UPS

**Power Distribution Units:** If your application and power distribution needs change in the future, optional rackmount Power Distribution Units (PDUs) are available. The rackmount PDUs can easily be swapped on-site, offering the highest level of flexibility.

Opt'l PDU Part N	lo. SPDU2K-0-8	SPDU3K-0-8	
Input voltage (nominal)	120 V, 50/60 Hz, 1f	120 V, 50/60 Hz, 1f	
Input current maximum	16 AC	24 AC	
Line cord/plug	6' / 5-20P	6′ / L5-30P	
Receptacles/fuse size	(8) 5-20R / 15 Amp	8) 5-20R / 15 Amp	
For use with	S2000XA and S2000XA-RM	S3000XA and S3000XA-RM	



Sinergy S Series PDU for 2 and 3 kVA rackmount models

Connectivity: MopUPSProfessional software enables a variety of responses to faults and other events that affect the UPSs and the equipment they protect:

ManageUPS®NET adapter provides web and SNMP based UPS monitoring. It can also be used as a server for multiple MopUPS clients in order to facilitate wide area network shutdowns from a single UPS.

	MopUPS SK-PROMOP-02	ManageUPSNET AK-MUN2-02
System shutdown	•	
Event messaging via pager, email, network or SNMP traps	•	
Log events	•	
Run a command, script or batch file	•	
Web-based system management		•
Full SNMP client		•
Supports Terminal, Telnet, and FTP a	ccess	•

*FilterOne:* Used to enhance the output of the 700 - 1000 VA Sinergy S Series UPS. When ordering FilterOne, use part number FS11015A-S1SB (1 receptacle) or FS11015A-S4SB (4 receptacles).



# **ONEAC SINERGY S Series UPS:** Specifications

### Performance Characteristics

Nominal input and output voltage: single phase, 120 V

Surge voltage withstand capability: ANSI/IEEE C62.41 Category A&B

Load power factor range (crest factor): 3:1 Load regulation response time: < 4 mS

Batteries: sealed, maintenance-free lead acid, VRLA Recharge time to 60% available capacity: 5 - 8 hours

Input frequency tolerance: ± 5%

Cooling: Fan

Principle of operation: On-line, double conversion

Frequency: 50/60 Hz ± 5%, automatic frequency recognition

Frequency tolerance, normal operation: Output frequency synchronized with mains frequency

Frequency tolerance, power failure: ± 0.5% (internal frequency generator)

Distortion coefficient (linear load): <4%

Automatic bypass: integrated

LEDs: UPS status, battery meter, load level

Alarms: Mains power, low battery, overload, on bypass

Admissible ambient temperature (normal operations): (10°C to +40°C)

Recommended operational temperature: (+15°C to +30°C) (for integrated batteries)

Storage temperature: -15°C to +40°C Relative humidity: 20 to 90%, non condensing

Electrical safety: UL1778 Approvals: UL1778, cUL

Normal Load Rating	700 VA	1000 VA	2000 VA	3000 VA
Tower Part Numbers	S700A-1	S1000XA-1	S2000XA-1	S3000XA-1
Rackmount Part Number	S700X-RM-1	S1000XA-RM-1	S2000XA-RM-1	S3000XA-RM-1
Input Connector	5-15P	5-15P	L5-20P	L5-30P
Tower Receptacles	(3) 5-15R	(3) 5-15R	(3) 5-15R/(1) L5-20R*	(3) 5-15R/(1) L5-30R*
Rackmount Receptacles	(3) 5-15R	(3) 5-15R	(2) 5-20R*	(1) L5-30R*
Input	700 VA	1000 VA	2000 VA	3000 VA
Input	single phase	single phase	single phase	single phase
Input Voltages	120	120	120	120
Voltage Range	80-138 V	80-138 V	80-138 V	80-138 V
Frequency (auto detecting)	50/60 Hz ± 5%	50/60 Hz ± 5%	50/60 Hz ± 5%	50/60 Hz ± 5%
Maximum Current 120 (amps)	10	12	20	30
Power Factor	0.95	0.95	0.95	0.95
AC Output	700 VA	1000 VA	2000 VA	3000 VA
Output Voltages	120 V	120 V	120 V	120 V
Frequency	50/60 Hz ± 0.5%	50/60 Hz ± 0.5%	50/60 Hz ± 0.5%	50/60 Hz ± 0.5%
Circuit Breaker Trip Rating (amps)	15	15	20	30
Voltage Regulation	± 0.3%	± 0.3%	± 0.3%	± 0.3%
Voltage THD	< 4%	< 4%	< 4%	< 4%
Efficiency	> 83%	> 83%	> 83%	> 83%
Overload - for 1.5 seconds	130%	130%	130%	130%
- for 10 seconds	110%	110%	110%	110%
Battery Data	700 VA	1000 VA	2000 VA	3000 VA
Amps	25	25	25	25
Volts (DC)	24	36	96	96
Uses Tower Battery Pack model #	NA	SBP1000-1	SBP3000-1	SBP3000-1
Maximum Battery Packs	NA	2	2	2
Uses Rack Battery Pack model #	NA	SBP1000-RM-1	SBP3000-RM-1	SBP3000-RM-1
Maximum Battery Pack	NA	2	5	5
Tower/Rackmount Battery Pack Weight in	lbs (kg) NA	44/48 (20/22)	113/60 (51/27)	113/60 (51/27)
Mechanical	700 VA	1000 VA	2000 VA	3000 VA
Tower Dimensions - H X W X D in.	8.9x5.7x15.8	8.9x5.7x15.8	13.8x7.9x17.9	13.8x7.9x17.9
(mm)	(226x145x401)	(226x145x401)	(226x201x455)	(226x201x455)
Rackmount Dimensions - H X W X D in.	3.5 x 19 x 17.6	3.5 x 19 x 17.6	3.5 x 19 x 18.8	3.5 x 19 x 18.8
(mm)	(89x483x447)	(89x483x447)	(89x483x478)	(89x483x478)
Tower/Rackmount Net Weight in lbs. (kg)	32/33 (15/15)	39/40 (18/18)	80/27 (36/12)	80/30 (36/14)
Runtime (internal)	700 VA	1000 VA	2000 VA	3000 VA
Half Load/Full Load (min.)	12/6	14/6	22/10	14/6

<sup>\*</sup>See inside page for optional Power Distribution Units.

\*\* 230 V international models are available.

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— Certification No. A2900







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