

UPS **MILITARY** **FIELD-GRADE**

Uninterruptible Power Supply



Shallow Rack



Smaller

Lighter

More Powerful



Sealed Weather-Proof Construction

SynQor[®]

UPS **MILITARY** **FIELD-GRADE** *Uninterruptible Power Supply*

SynQor's Military Field-Grade Uninterruptible Power Supply units are designed for the extreme environmental and demanding electrical conditions of Military/Aerospace applications. SynQor's UPS incorporates field proven high efficiency designs and rugged packaging technologies. This UPS will accept a wide range of input voltage and frequency values while delivering a well-conditioned AC output to the load. The use of lithium ion batteries permits the lowest profile and lowest weight solution in its power class. It is designed to comply with a wide range of military standards. Options include two DC outputs, a DC input rated for military 28 VDC sources, and an electronic breaker on the AC output to permit fault-tolerant parallel operation for higher power and/or N+M redundant systems.

UPS PRODUCT FEATURES

- ◆ Sealed, weather-proof, shock-proof construction
- ◆ Military Tough, Die-Cast Aluminum Chassis
- ◆ 1250W-1500VA output power
- ◆ >10 minute run-time at full power
- ◆ Full power operation -20°C to +50°C (Storage: -40°C to +65°C)
- ◆ True on-line double conversion
- ◆ Hot swappable internal battery pack (lithium ion)
- ◆ Universal AC input: 80-265VAC; 47-65Hz
- ◆ Dual input: AC and optional DC
- ◆ True on-line double conversion
- ◆ Cold-start with no AC or DC input connections
- ◆ Power factor correction at AC input
- ◆ Pure sinusoidal AC output voltage (115VAC, 60Hz)
- ◆ Handles 0.0—1.0 power factor loads and non-linear loads
- ◆ User I/O and Configuration signal ports
- ◆ Up to 3 units can be combined for higher power, voltage or a 3-Phase AC output
- ◆ Up to 32 units can be combined to form a higher power, fault-tolerant, glitch-free system, perhaps with N+M redundancy, by ordering with the "AC Output Electronic Breaker" option and the appropriate configuration cable
- ◆ Shallow rack mount unit (17.00"W x 13.80"D x 3.40"H)
- ◆ Low weight: 33 lbs. (including battery)

OPTIONS

- ◆ DC input (28Vnom) for dual source
- ◆ UPS-1250/1500-H-2S >13.5 minutes of run-time
- ◆ UPS-1250/1500-M-2S >16 minutes of run-time and -40°C operation
- ◆ Wide-range AC input frequency: 47Hz to 800Hz
- ◆ 115Vrms or 230Vrms AC output
- ◆ 50Hz, 60Hz, or 400Hz output
- ◆ DC1: Auxiliary isolated DC output (up to 500W)
- ◆ DC2: High power DC output parallelable for higher power (UPS-1500 up to 1250W)
- ◆ Shipboard version with floating neutral wire
- ◆ N + 1 Redundancy

IN-LINE MANUFACTURING PROCESS

- ◆ AS9100 and ISO 9001 certified facility
- ◆ Full component traceability

SPECIFICATION COMPLIANCE

UPS units are designed to meet:

- ◆ MIL-STD-461F - Electromagnetic Interference
- ◆ MIL-STD-704F - Aircraft Electrical Power
- ◆ MIL-STD-810G - Environmental Engineering
- ◆ MIL-STD-1275D - Vehicle Electrical Power
- ◆ Mil-STD-1399-300B - Interface Shipboard

AC & DC Output Options

Base Model				
Model Number	Power	Battery Run-Time@Full Power (80% Power)	Height (W x D x H)	Weight
UPS-1500-S-2S (1 BAT-0200-S Pack)	1250 W 1500 VA	>10 min. (>13 min.)	2U (17" x 13.80" x 3.40")	33 lbs.
UPS-1500-H-2S (1 BAT-0400-H Pack)	1250 W 1500 VA	>13.5 min. (>18 min.)	2U (17" x 13.80" x 3.40")	34.8 lbs.
UPS-1500-M-2S (1 BAT-0400-M Pack)	1250 W 1500 VA	>16 min. (>22 min.)	2U (17" x 13.80" x 3.40")	34.8 lbs.

Base Models	Options							Options	
	AC Input Freq Type	AC Output Voltage	AC Output Neutral Wire	AC Output Set Point Freq	DC Input / DC2 Output	DC1 Output	Additional Options	AC Input Freq Type	AC Output Voltage
UPS-1500-S-2S- UPS-1500-H-2S- UPS-1500-M-2S-	L W	1 2	G F R	5 6 4	S D M P R V W	00 12 15 24 28 40 50	-E 00 CE	L W	1 115 Vrms 2 230 Vrms
								G F R	Grounded Floating* AC Output Electronic Breaker*
								5 6 4	50 Hz 60 Hz 400 Hz
								S D M P R V W	Not Installed DC Input DC2 Out 24 VDC with Droop Share DC2 Out 24 VDC No Share DC2 Out 28 VDC with Droop Share DC2 Out 28 VDC No Share DC2 Out 50 VDC No Share
								00 12 15 24 28 40 50	None 12 V 15 V 24 V 28 V 40 V 50 V
								-E 00 CE	Ethernet/SNMP No CE Marking CE Marking

Not all combinations make valid part numbers, please contact SynQor for availability. See the Product Summary web page for more options.

***Notes:**

Order "F: Floating" option when configuring the AC output for multi-unit combinations of up to 3 units.

Order "R: AC Output Electronic Breaker" option for fault-tolerant, glitch-free parallel systems of up to 32 units with N+M redundancy. The AC output neutral wire will not be connected to the chassis. Requires Ethernet / SNMP Option.

Examples:

UPS-1500-S-2S-L1G6D28-C00, UPS-1500-M-2S-L2G5S00-E00

UPS-1500-S-2S-L2G5S00-ECE (230 V output with CE marking)

DC Only Output Options

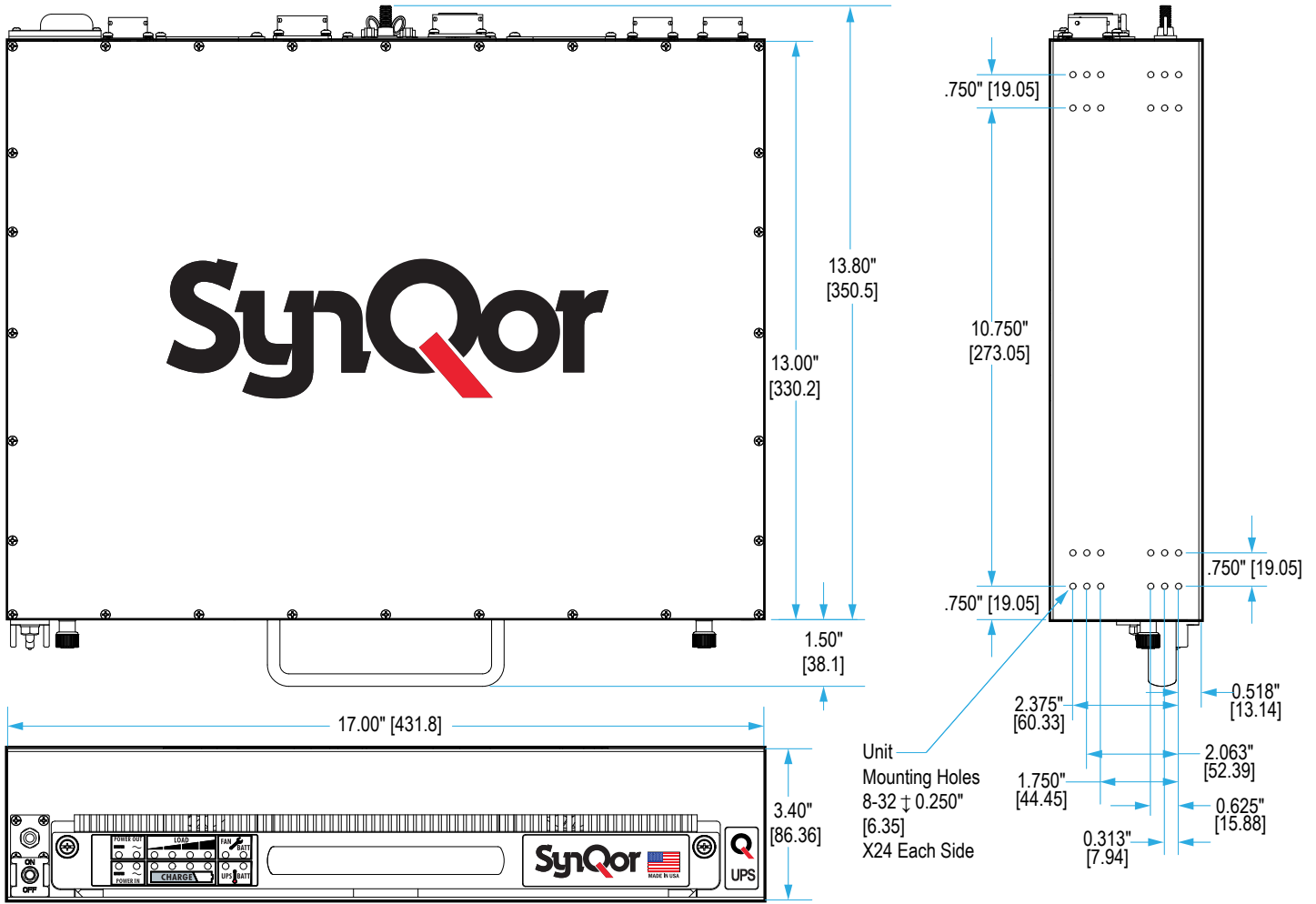
Base Model				
Model Number	Power	Battery Run-Time@Full Power (80% Power)	Height (W x D x H)	Weight
UPS-1250-S-2S (1 BAT-0200-S Pack)	1250 W	>10 min. (>13 min.)	2U (17" x 13.80" x 3.40")	33 lbs.
UPS-1250-H-2S (1 BAT-0400-H Pack)	1250 W	>13.5 min. (>18 min.)	2U (17" x 13.80" x 3.40")	34.8 lbs.
UPS-1250-M-2S (1 BAT-0400-M Pack)	1250 W	>16 min. (>22 min.)	2U (17" x 13.80" x 3.40")	34.8 lbs.

Base Models	Options				Options	
	AC Input Freq	DC Regulation Type	DC Output Voltage	DC Input	Additional Options	AC Input Freq
UPS-1250-S-2S- UPS-1250-H-2S- UPS-1250-M-2S-	L W	R P	24 28 48	D00	-E 00 CE	L W
						R P
						24 28 48
						D00
						-E 00 CE

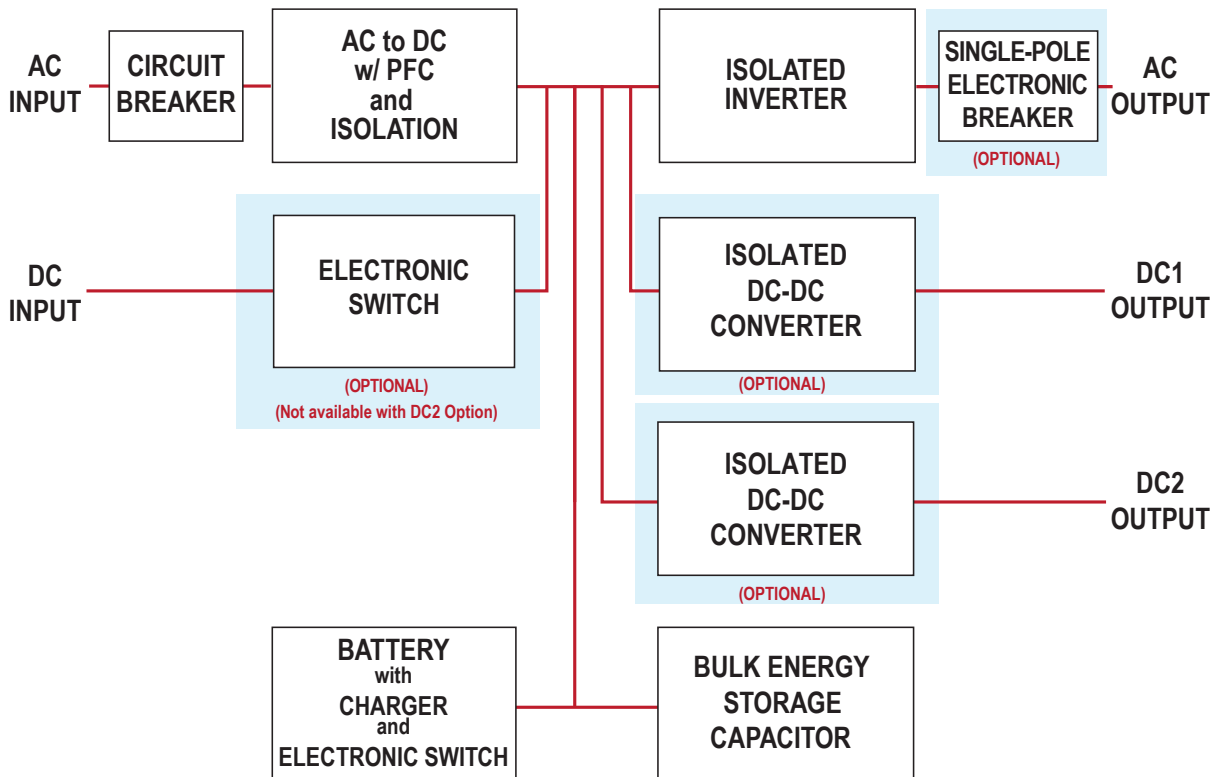
Not all combinations make valid part numbers, contact SynQor for availability. See the Product Summary web page for more options.

Examples: UPS-1250-S-2S-LR28D00-E00, UPS-1250-M-2S-WR28D00-E00, UPS-1250-S-2S-LR28D00-ECE (with CE mark)

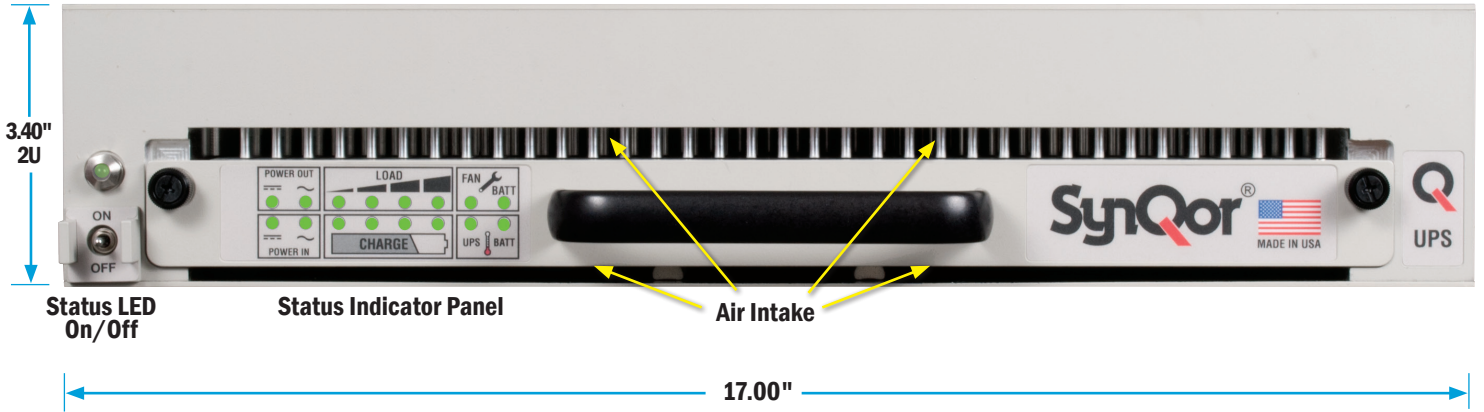
MECHANICAL DIAGRAM



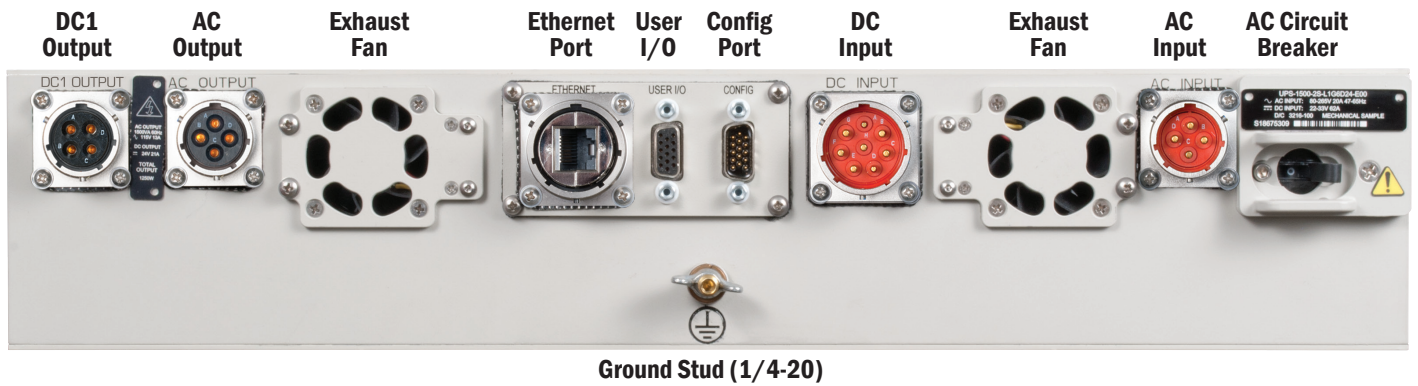
BLOCK DIAGRAM



UPS-1500-[S,H,M]-2S



UPS-1500-[S,H,M]-2S WITH DC INPUT / DC1 OUTPUT OPTIONS



UPS-1500-[S,H,M]-2S WITH DC1 OUTPUT / DC2 OUTPUT OPTION





Power Converters & Systems



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