

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

Sealed

Shock-Proof

Weather-Proof

Rugged Construction



Military Field-Grade Uninterruptible Power Supply (UPS-1500)

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 polymer 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
- 1250 W-1500 VA; 2500 W-3000 VA output power
- UPS-1500-S-1U >10 minute run-time at full power
- Full power operation -20 °C to +55 °C
- Shallow Rack full power operation -20 °C to +50 °C
- Storage temperature: -40 °C to +65 °C
- True on-line double conversion
- Hot swappable internal battery pack (lithium polymer)
- Universal AC input: 80-265 VAC; 47-65 Hz
- Dual input: AC and optional DC
- Cold-start with no AC or DC input connections
- Power factor correction at AC input
- Pure sinusoidal AC output voltage
- 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

Specification Compliance

UPS units are designed to meet:

- MIL-STD-704F - Aircraft Electrical Power Characteristics
- MIL-STD-1399-300B - Interface Std for Shipboard Systems
- MIL-STD-1275D - Vehicle Electrical Power Characteristics
- MIL-STD-461F - Electromagnetic Interference
- MIL-STD-810G - Environmental Engineering Considerations

Options

- DC input (28 Vnom) for dual source
- UPS-1500-M-1U/UPS-1500-M-2S >16 minutes of run-time and -40°C operation
- UPS-1500-E-2U >24 minutes of run-time
- Wide-range AC input frequency: 47 Hz to 800 Hz
- 115 Vrms or 230 Vrms AC output
- 50 Hz, 60 Hz, or 400 Hz output
- DC1: Auxiliary isolated DC output (up to 500 W)
- DC2: High power DC output parallelable for higher power (UPS-1500 up to 1250 W; UPS-3000 up to 2500 W)
- Shipboard version with floating neutral wire
- N+1 Redundancy



UPS-1500-[S,M]-1U
(17.00" x 21.60" x 1.73")

Military Field-Grade Uninterruptible Power Supply (UPS)

AC & DC Output Base Model Number	Power	Battery Run-Time@Full Power (80% Power)	Height (W x D x H)	Weight
UPS-1500-S-1U (1 Standard Battery Pack)	1250 W 1500 VA	>10 min. (>13 min.)	1U (17.00" x 21.60" x 1.73")	32 lbs.
UPS-1500-M-1U (1 Standard Battery Pack)	1250 W 1500 VA	>16 min. (>22 min.)	1U (17.00" x 21.60" x 1.73")	33.8 lbs.
UPS-1500-S-2S (1 Standard Battery Pack)	1250 W 1500 VA	>10 min. (>13 min.)	2U (17.00" x 13.80" x 3.40")	32 lbs.
UPS-1500-M-2S (1 Standard Battery Pack)	1250 W 1500 VA	>16 min. (>22 min.)	2U (17.00" x 13.80" x 3.40")	33.8 lbs.
UPS-1500-E-2U (1 Extended Battery Pack)	1250 W 1500 VA	>24 min. (>31 min.)	2U (17.00" x 21.60" x 3.33")	50 lbs.
UPS-3000-S-2U (2 Standard Battery Packs)	2500 W 3000 VA	>10 min. (>13 min.)	2U (17.00" x 22.22" x 3.40")	65 lbs.
UPS-3000-M-2U (2 Standard Battery Packs)	2500 W 3000 VA	>16 min. (>22 min.)	2U (17.00" x 22.22" x 3.40")	68.6 lbs.

AC & DC Output Base Models	AC Input Freq	AC Output Voltage	AC Output Neutral Wire	AC Output Set Point Freq	DC Input / DC2 Output	DC1 Output	Additional Options
UPS-1500-S-1U- UPS-1500-M-1U- UPS-1500-S-2S- UPS-1500-M-2S- UPS-1500-E-2U- UPS-3000-S-2U- UPS-3000-M-2U-	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
AC Input Freq		L 47-65 Hz W 47-800 Hz					
AC Output Voltage		1 115 Vrms 2 230 Vrms					
AC Output Neutral Wire		G Grounded F Floating* R AC Output Electronic Breaker*					
AC Output Set Point Freq		5 50 Hz 6 60 Hz 4 400 Hz					
DC Input / DC2 Output		S Not Installed D DC Input M DC2 Out 24 VDC with Droop Share P DC2 Out 24 VDC No Share R DC2 Out 28 VDC with Droop Share V DC2 Out 28 VDC No Share W DC2 Out 50 VDC No Share					
DC1 Output		00 None 12 12 V 15 15 V 24 24 V 28 28 V 40 40 V 50 50 V					
Additional Options		-E Ethernet/SNMP with Configuration Loading 00 No CE Marking CE 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.

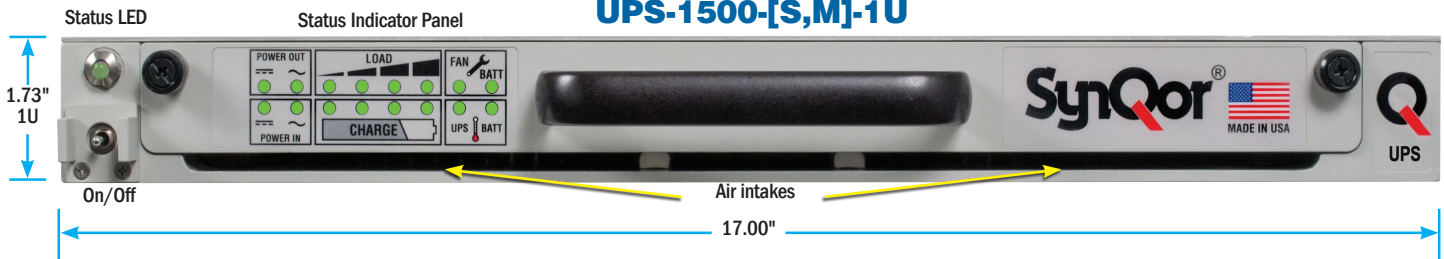
Order "R: AC Output Electronic Breaker" option for fault-tolerant, glitch-free parallel systems of up to 32 units with N+M redundancy.
The AC output neutral wire will not be connected to the chassis.

Examples:

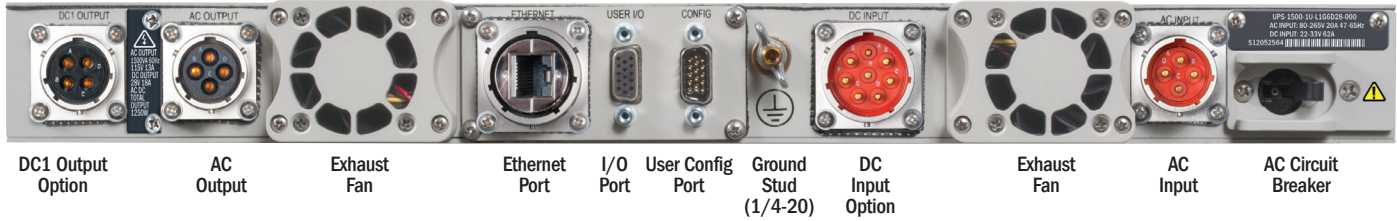
UPS-1500-E-2U-L1G6D28-E00, UPS-1500-M-1U-L2G5S00-E00

UPS-1500-S-1U-L2G5S00-ECE (230 V output with CE marking)

UPS-1500-[S,M]-1U



UPS-1500-[S,M]-1U with DC Input/DC1 Output Option



UPS-1500-[S,M]-1U with DC1 Output/DC2 Output Option



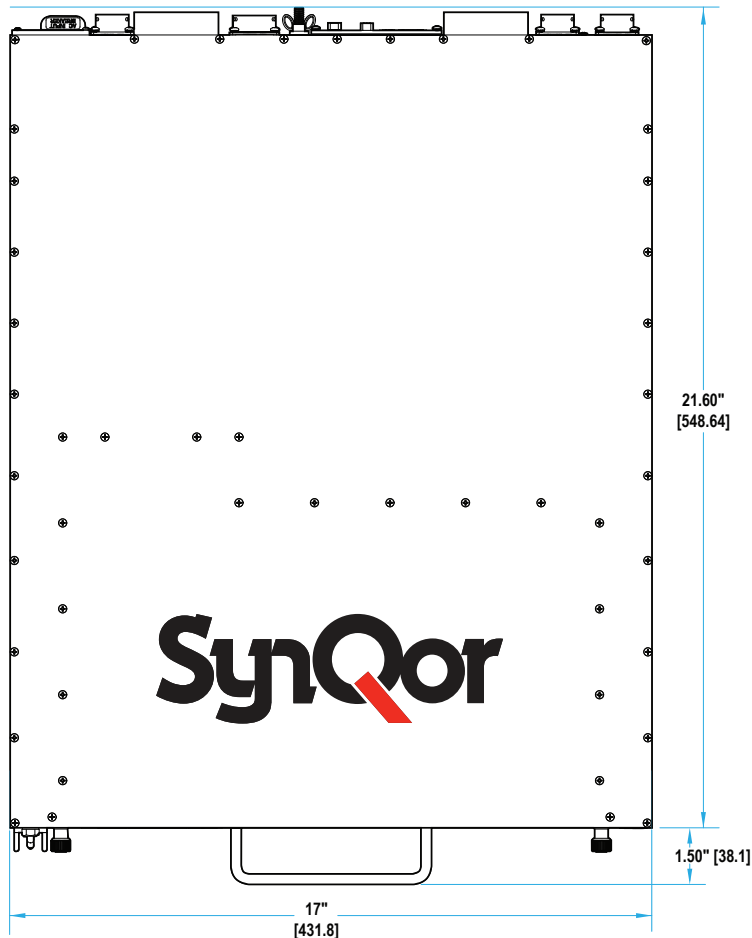
1.25 kW 1U Model



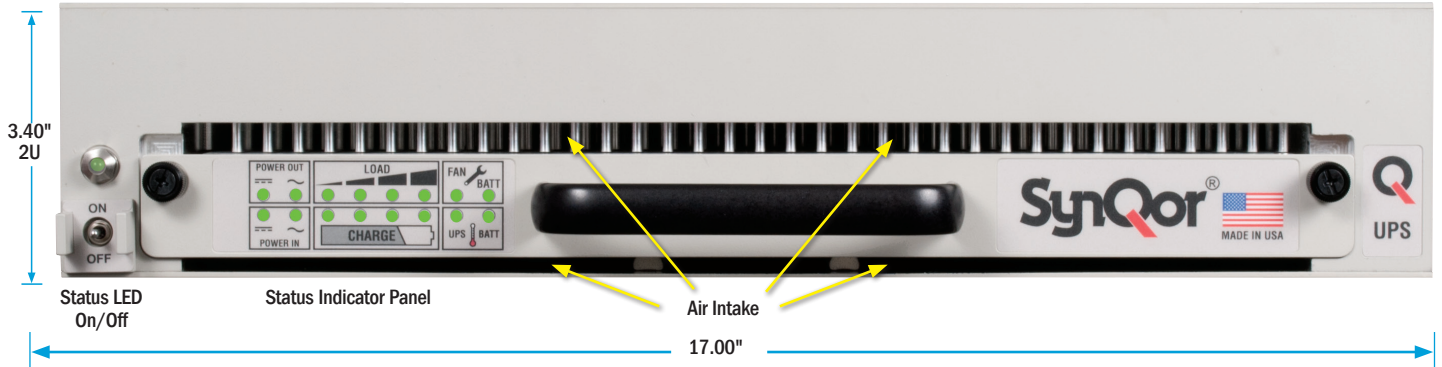
Hot swappable
battery pack



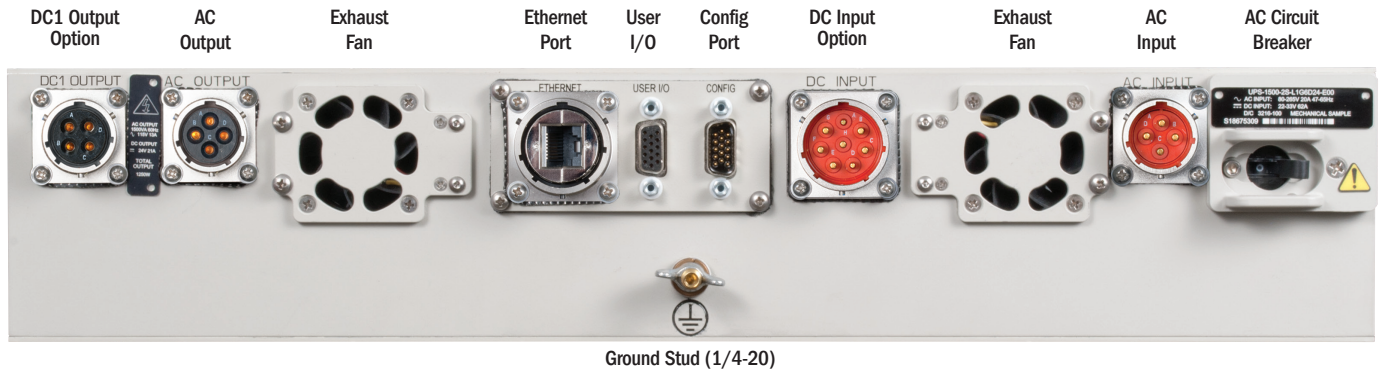
Visit our website for
more information



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

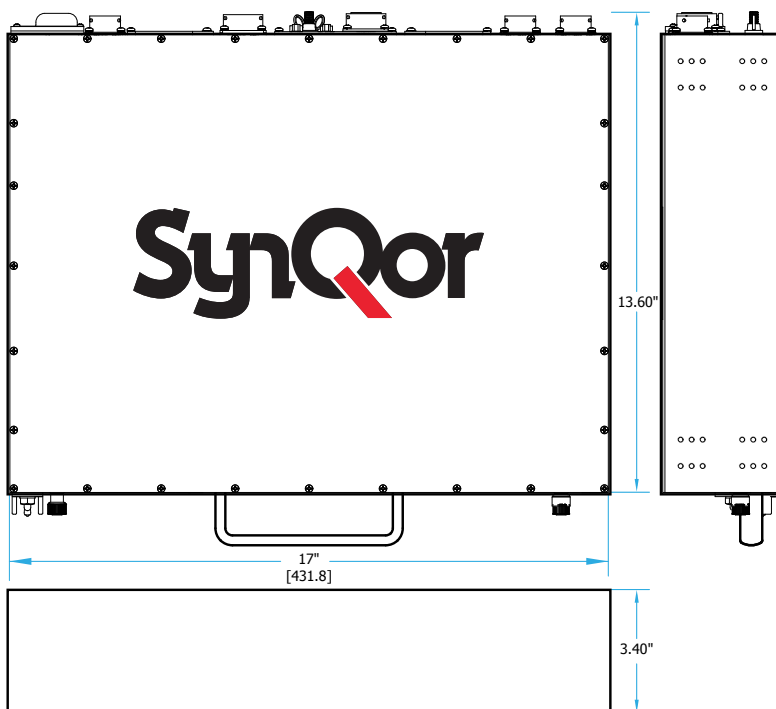


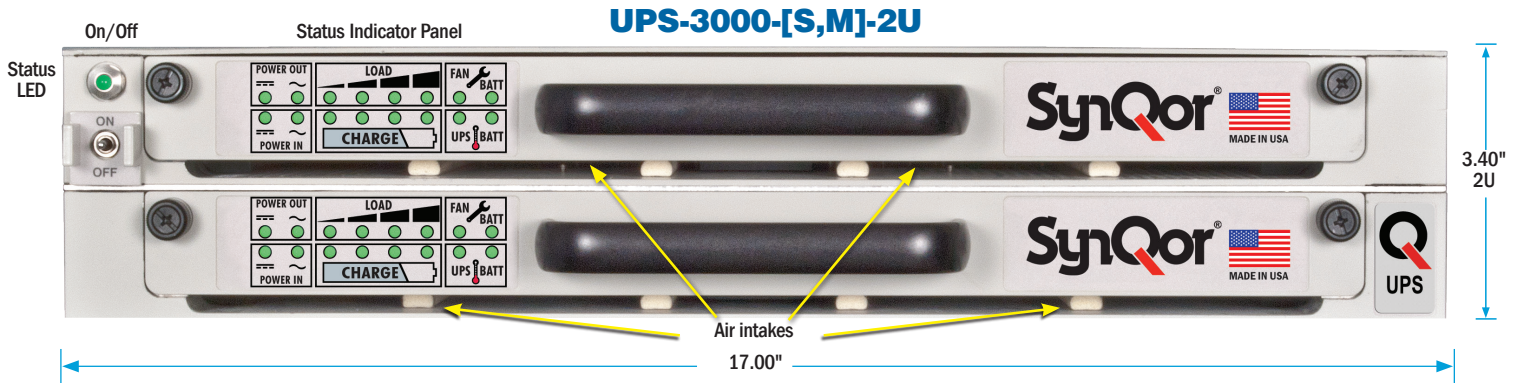
UPS-1500-[S,M]-2S with DC Input / DC1 Output Options



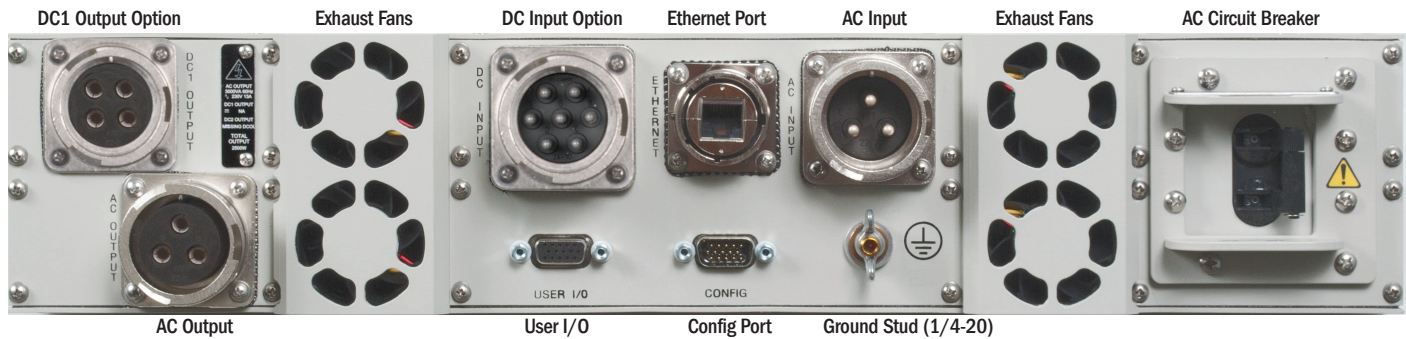
UPS-1500-[S,M]-2S with DC1 Output / DC2 Output Option

DC2 Output Option

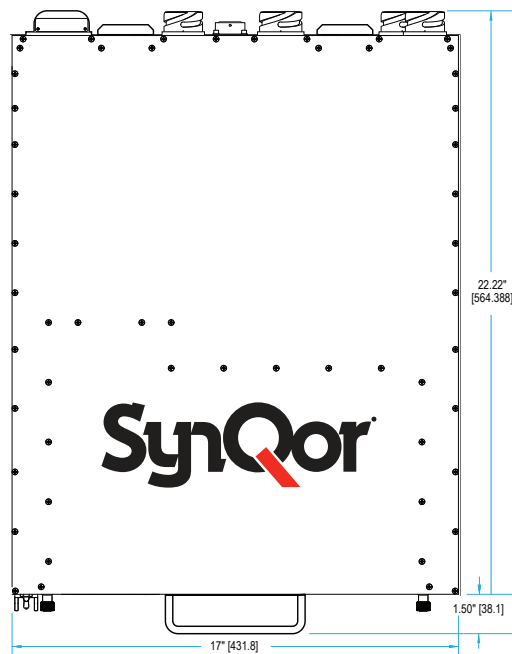
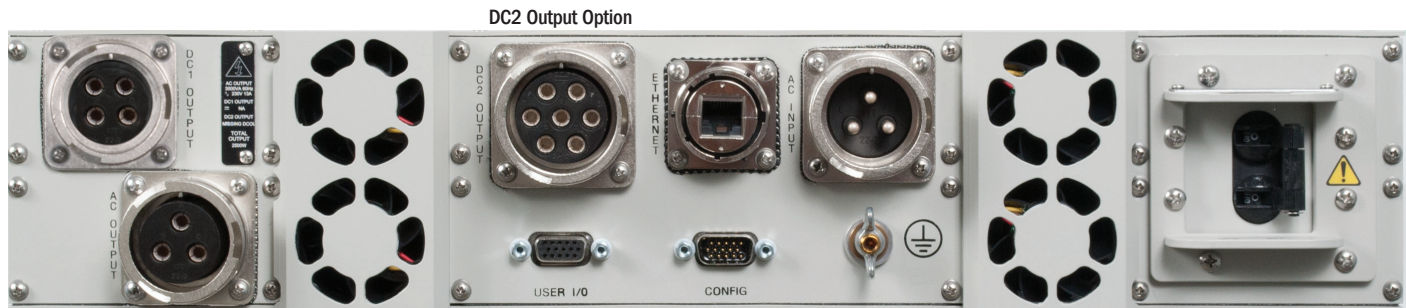




UPS-3000-[S,M]-2U with DC Input / DC1 Output Options



UPS-3000-[S,M]-2U with DC1 Output / DC2 Output Options





UPS-1500-S-2S

1250 W (1500 VA)

Shallow Rack-Mount Package

>10 Minutes of Run Time at Full Power

Only 33 lbs.



UPS-1500-S-1U

1250 W (1500 VA)

1U High Rack-Mount Package

>10 Minutes Battery Run Time

Only 32 lbs.



UPS-3000-S-2U

2500 W (3000 VA)

2U High Rack-Mount Package

>10 Minutes Battery Run Time

Only 65 lbs.



UPS-1500-E-2U

1250 W (1500 VA)

Expanded Internal Battery for

>24 Minutes of Run Time at Full Power

Only 50 lbs.

UPS MILITARY FIELD-GRADE

Uninterruptible Power Supply

Sealed

Shock-Proof

Weather-Proof

Rugged Construction



DC Output Only Military Field-Grade Uninterruptible Power Supply (UPS-1250)

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 DC output to the load. The use of lithium polymer 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.

UPS Product Features

- Sealed, weather-proof, shock-proof construction
- Military Tough, Die-Cast Aluminum Chassis
- 1250 W DC output power
- >10 minute run-time at full power
- Full power operation -20 °C to +55 °C
- Shallow Rack full power operation -20 °C to +50 °C
- Storage temperature: -40 °C to +65 °C
- True on-line double conversion
- Hot swappable internal battery pack (lithium polymer)
- Universal AC input: 80-265 VAC; 47-65 Hz
- Dual input: AC and DC
- Cold-start with no AC or DC input connections
- Power factor correction at AC input
- User I/O and Configuration signal ports

Specification Compliance

UPS units are designed to meet:

- MIL-STD-704F - Aircraft Electrical Power Characteristics
- MIL-STD-1399-300B - Interface Std for Shipboard Systems
- MIL-STD-1275D - Vehicle Electrical Power Characteristics
- MIL-STD-461F - Electromagnetic Interference
- MIL-STD-810G - Environmental Engineering Considerations

Options

- UPS-1250-M-1U / UPS-1250-M-2S >16 minutes of run-time and -40°C operation
- UPS-1250-E-2U >24 minutes of run-time
- 2U Shallow rack mount (17.00" x 13.80" x 3.40")
- Wide-range AC input frequency: 47 Hz to 800 Hz
- 270 V DC3 output with:
 - DC1 Auxiliary isolated DC output (up to 500 W)
 - DC2 Auxiliary high power DC output (up to 1250 W) parallelable for higher power
- N+M redundancy



DC Output Only Military Field-Grade Uninterruptible Power Supply (UPS)

DC Output Only Base Model Number	Power	Battery Run-Time@Full Power (80% Power)	Height (W x D x H)	Weight
UPS-1250-S-1U (1 Standard Battery Pack)	1250 W	>10 min. (>13 min.)	1U (17" x 22.25" x 1.73")	33 lbs.
UPS-1250-M-1U (1 Standard Battery Pack)	1250 W	>16 min. (>22 min.)	1U (17" x 22.25" x 1.73")	34.8 lbs.
UPS-1250-S-2S (1 Standard Battery Pack)	1250 W	>10 min. (>13 min.)	2U (17" x 13.80" x 1.73")	33 lbs.
UPS-1250-M-2S (1 Standard Battery Pack)	1250 W	>16 min. (>22 min.)	2U (17" x 13.80" x 1.73")	34.8 lbs.
UPS-1250-E-2U (1 Extended Battery Pack)	1250 W	>24 min. (>31 min.)	2U (17" x 22.25" x 3.33")	52 lbs.

DC Only Output Base Models	AC Input Freq	DC Regulation Type	DC Output Voltage	DC Input	Additional Options
UPS-1250-S-1U- UPS-1250-M-1U- UPS-1250-S-2S- UPS-1250-E-2U-	L W	R	24 28 48	D00	-E 00 CE

AC Input Freq	L 47-65 Hz W 47-800 Hz
DC Regulation	R Fully Regulated
DC Output	24 24 V Output 28 28 V Output 48 48 V Output
DC Input	D00 DC Input
Additional Options	-E Ethernet/SNMP 00 No CE Marking CE CE Marking

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

Examples: UPS-1250-S-1U-LR28D00-000, UPS-1250-E-2U-WR28D00-E00,
UPS-1250-S-1U-LR28D00-0CE (with CE mark)

High Voltage Adjustable DC Output Only Military Field-Grade Uninterruptible Power Supply (UPS)

High Voltage Adjustable DC Output Model Number	Power	Battery Run-Time@Full Power (80% Power)	Height (W x D x H)	Weight
UPS-1250-S-1U (1 Standard Battery Pack)	1250 W	>10 min. (>13 min.)	1U (17" x 21.60" x 1.73")	32 lbs.
UPS-1250-M-1U (1 Standard Battery Pack)	1250 W	>16 min. (>22 min.)	1U (17" x 21.60" x 1.73")	33.8 lbs.
UPS-1250-E-2U (1 Extended Battery Pack)	1250 W	>24 min. (>31 min.)	2U (17" x 21.60" x 3.33")	50 lbs.

High Voltage Adjustable DC Output Base Models	AC Input Freq	DC3 Output	DC Input/DC2 Output	DC1 Output	Additional Options
UPS-1250-S-1U- UPS-1250-M-1U- UPS-1250-E-2U-	L W	270	S D M P R V W	00 12 15 24 28 40 50	-E 00

AC Input Frequency	L 47-65 Hz W 47-800 Hz
DC3 Output	270 270 V Default, 150-325 VDC
DC Output Voltage	S Not Installed D DC Input M DC2 Out 24 VDC with Droop Share P DC2 Out 24 VDC No Droop Share R DC2 Out 28 VDC with Droop Share V DC2 Out 28 VDC No Droop Share W DC2 Out 50 VDC No Droop Share
DC Input/DC2 Output	00 None 12 12 V 15 15 V 24 24 V 28 28 V 40 40 V 50 50 V
Additional Options	-E Ethernet/SNMP with Configuration Loading 00 No CE Marking

Not all combinations make valid part numbers,
please contact SynQor for availability.

See the Product Summary web page for more options.

Examples:

UPS-1250-S-1U-L270S12-E00,

UPS-1250-E-2U-L270D00-E00

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



Military Shelter-Grade Uninterruptible Power Supply (UPS-MS)

SynQor's family of rack-mounted Military Shelter-Grade Uninterruptible Power Supply units are designed for the environmental and electrical conditions of Military applications. SynQor's UPS incorporates proven high efficiency designs and 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 polymer 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.

UPS Product Features

- Hot swappable internal battery pack (lithium polymer)
- >10 minute run-time at full power
- 1250 W-1500 VA output power
- Full power operation -10 °C to +50 °C
- Storage temperature: -10 °C to +65 °C
- True on-line double conversion
- Universal AC input: 80-265 VAC; 47-65 Hz
- Cold-start with no AC input connections
- Power factor correction at AC input
- Pure sinusoidal AC output voltage
- Handles 0.0 - 1.0 power factor loads and non-linear loads
- User I/O and Configuration signal ports
- Low weight: 42 lbs. (including chasis & batteries)

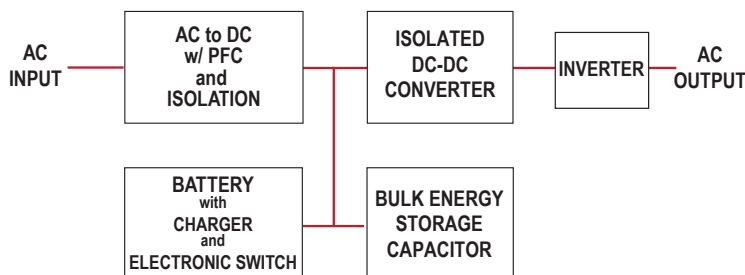
Specification Compliance

UPS units are designed to meet:

- MIL-STD-1399-300B - Interface Std for Shipboard Systems
- MIL-STD-461F - Electromagnetic Interference
- MIL-STD-810G - Environmental Engineering Considerations

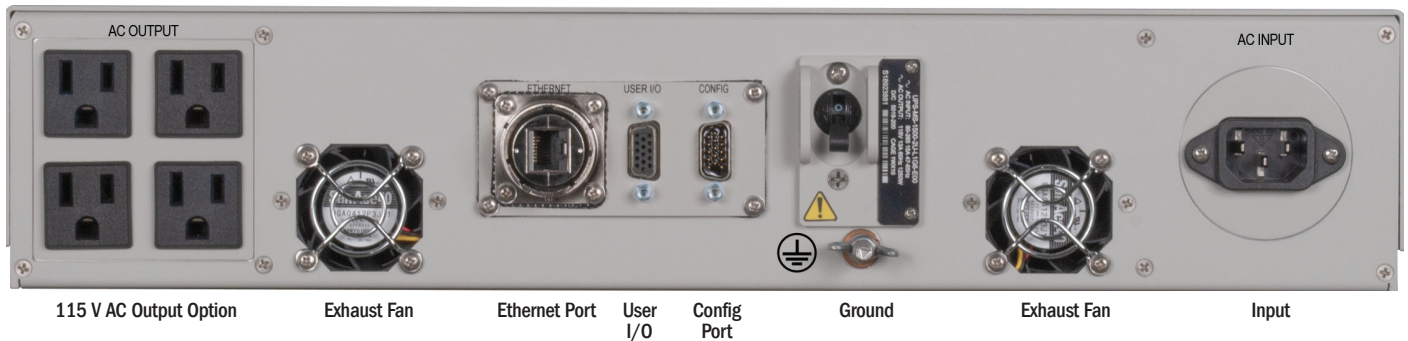
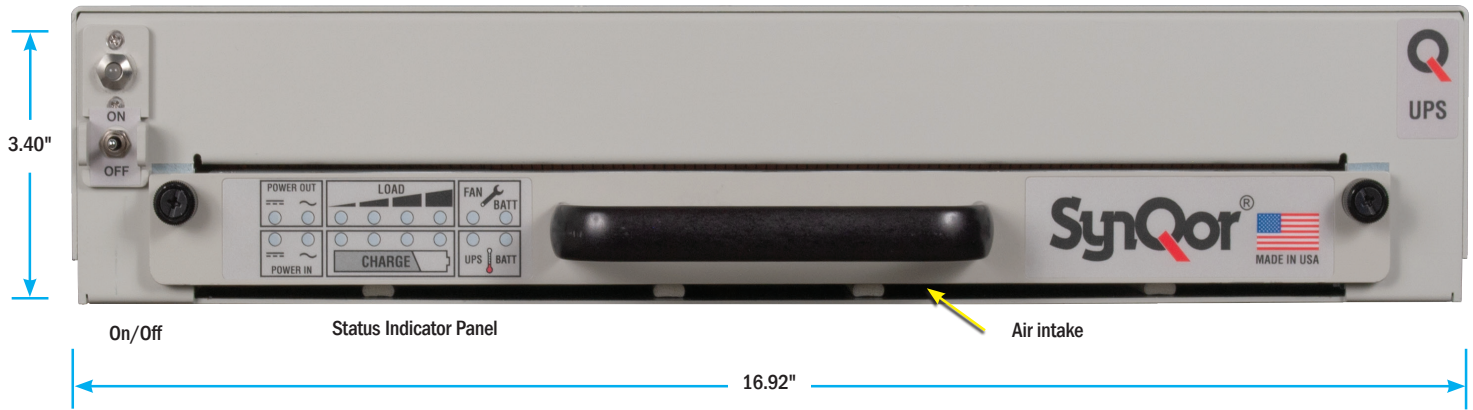
Options

- 115 Vrms or 230 Vrms AC output
- 50 Hz or 60 Hz



Military Uninterruptible Power Supply

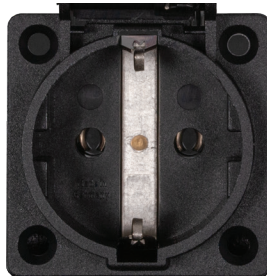
UPS-MS-1500



Output Connector Options



NEMA 5-15R (US -115 V)



Type F (EU-230 V)



Type G (UK-230 V)



Type I (ANZ-230 V)

Military Shelter-Grade Uninterruptible Power Supply (UPS-MS)

AC Base Models				
Model Number	Power	Battery Run-Time @Full Power (80% Power)	Height (W x D x H)	Weight
UPS-MS-1500-S-2U (1 Standard Battery Pack)	1250 W 1500 VA	>10 min. (>13 min.)	2U (16.92" x 22.13" x 3.40")	42 lbs.

Options						Options	
AC Base Models	AC Input Frequency	AC Output Voltage	AC Output Neutral Wire	AC Output Set Point Frequency	Additional Options	AC Input Frequency	L 47-65 Hz
UPS-MS-1500-S-2U-	L	1	G	5	-E 00 CE	AC Output Voltage	1 115 Vrms
		2					2 230 Vrms - EU
		3					3 230 Vrms - UK
		4					4 230 Vrms - ANZ
						AC Output Neutral Wire	G Grounded
						AC Output Set Point Frequency	5 50 Hz 6 60 Hz
						Additional Options	-E Ethernet/SNMP with Configuration Loading
							00 No CE Marking CE CE Marking (230 V only)

Not all combinations make valid part numbers, please contact SynQor for availability.

See the Product Summary web page for more options.

Examples:

UPS-MS-1500-S-2U-L1G6-E00, UPS-MS-1500-S-2U-L2G5-E00

UPS-MS-1500-S-2U-L2G5-ECE (230 V output with CE marking)