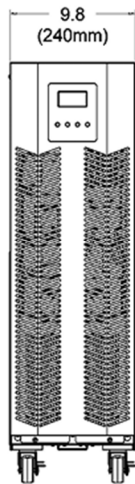
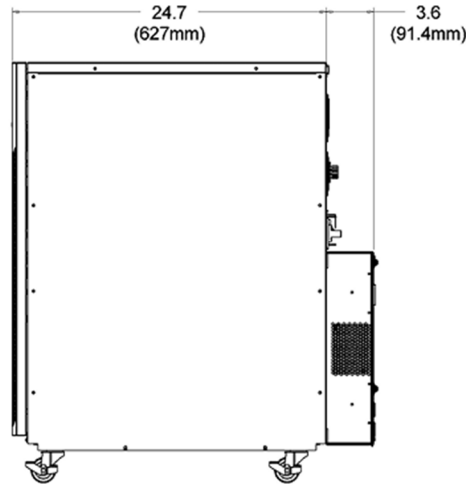


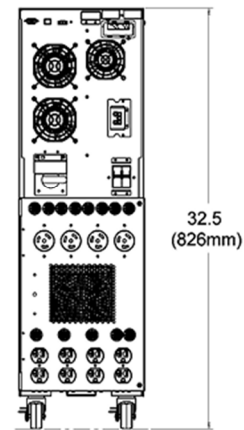
Security Plus II UPS Specifications



FRONT



SIDE



REAR

MODEL		ABCDEF4002-22	ABCDEF4002-22HW
TOPOLOGY		Dual DSP control double-conversion true sine wave output, IGBT rectifier and inverter with internal isolation transformer.	
INPUT	Voltage (VAC)	208 / 220 / 230 / 240	
	Voltage Range (VAC)	110 - 300	
	Voltage Tolerance	+28% / -15% @ Full Load 1.0 PF (Before Switching to Batteries)	
	Frequency (Hz)	50 / 60 Auto Detect	
	Frequency Tolerance	46 Hz to 64 Hz (Before Switching to Batteries)	
	Input PF	> 0.99	
	Input Current THD	< 4.0%	
	Input Connection	Hardwired Standard; Line Cord Optional (Contact Factory)	
	Inrush Current (A)	200 Max	
	Input Capacity (VA)	4494	
OUTPUT	Capacity	4000VA / 4000W	
	Voltage (VAC)	104 / 110 / 115 / 120 / 208 / 220 / 230 / 240	
	Voltage Regulation	± 2.0% Max, ± 1.0% Normal	
	Output Voltage THD	< 2.0%	
	Power Factor	1.0	
	Step Load Response	± 4.0% for 50% Step Load Change ± 6.0% for 100% Step Load Change Return to ± 3.0% of Nominal Within 11 Cycles	
	Crest Factor	3:1	
	Frequency (Hz)	50 / 60 Synchronize with Utility ±4	
	Frequency Regulation	± 0.1 Hz	
	Overload	10 Minutes < 110% 1 Minute < 130% 500ms > 300%	
	Efficiency	AC-AC > 90.0% ECO > 97% DC-AC > 88.0%	
	Common Mode Noise	< 0.5 VRMS	
	Output Connection	Hardwired Standard; Output Receptacles Optional (Contact Factory)	
BYPASS	Input Voltage (VAC)	110 ~ 276	
	Output Voltage (VAC)	110 ~ 276	
	Transformer Voltage Regulation	± 3.0%	
	Overload	Continuous Below 130% 1 Minute at 130% 1 Cycle at 1000%	

BATTERY	Voltage (VDC)	240, Nominal; 270 Float
	Battery	12V, UPS12460 Flame Retardant, High Rate, Sealed Lead-Acid
	Quantity	20
	Charge Current (ADC)	4.0
	Backup Time (min)	See Run-time Chart on Page 3
	Recharge Time	7 Hours to 90%
ENVIRONMENT	Temperature (°C)	Operating: 0 to 40 Transit: -15 to 60
	Altitude (m)	Operating: 2,000 Transit: 12,000
	Humidity	5.0% to 90.0%, Non-Condensing
	Audible (dBA)	55-60 @ 1 Meter from Front of Unit
	Heat Dissipation (BTU/hr)	1686
AGENCIES	EMC	FCC Part 15J Class A EN 55022 Class A / CISPR 22 IEC 61000-3-2 IEC61000-4-2, Electrostatic Discharge IEC61000-4-3, Level 3 Radiated Electromagnetic Field Immunity IEC61000-4-4, Level 4 Electrical Fast Transient / Burst Immunity IEC61000-4-5, Level 4 Surge Immunity IEC61000-4-6, Level 3 Immunity to Conducted Radio Frequency Disturbances IEC61000-4-8, Level 4 Power Frequency Magnetic Field Immunity IEC61000-4-11, Voltage Dips, Short Interruptions, and Voltage Variations IEC62040-1-1, Safety & Leakage Current IEC62040-1-2, Insulation & Dielectric Rigidity
	Safety Agencies	usTUVc listed to UL 1778 5 th Edition CSA22.2 No.107.3 EN 62040-2:2018
	RoHS	All Units are RoHS Compliant
OTHER	Communication	RS-232 USB DB-9 Dry Contacts Internal SNMP Adapter (Optional)
	Unit Weight (lbs/kg)	266 / 121
	Shipping Weight (lbs/kg)	299 / 136
	Plug & Receptacle*	Contact Factory for PDU Configurations

*Hardwired unit is standard. Plug & Receptacle is optional. Contact factory for part numbers.

NOISE REJECTION-ISOLATION: With unit under power and an ANSI/IEEE C62.41Cat. A pulse applied either normal or common mode at the input, the noise output voltage will be less than 10V normal mode and less than 0.5V common mode in all four quadrants (CM-NM, NM-NM, CM-CM, NM-CM).

SURGE VOLTAGE WITHSTAND CAPABILITY: Tested under power to ANSI/IEEE C62.41 Cat. A & B (formerly IEEE587-1980). Cat. A - 6000V @ 200 amps, 0.5 usec risetime, 100 kHz decay, Cat. B - 6000V @ 500 amps, 0.5 usec risetime, 100 kHz decay.

Compatible External (Extended Run) Battery Cabinets

ABCDEF4002-22 TYPICAL RUN-TIMES (MINs)				
	25% (1000 W)	50% (2000 W)	75% (3000 W)	100% (4000 W)
Internal Batteries Only	57	25	15	11
Internal + 1) D24040-22	172	76	46	32
Internal + 2) D24040-22	287	127	77	54
Internal + 3) D24040-22	402	177	108	75
Internal + 4) D24040-22	517	228	138	97
Internal + 5) D24040-22	632	279	169	118
Internal Batteries Only	57	25	15	11
Internal + 1) D24060-22	230	101	61	43
Internal + 2) D24060-22	402	177	108	75
Internal + 3) D24060-22	575	253	153	108
Internal + 4) D24060-22	> 12 Hrs	330	200	140
Internal + 5) D24060-22	> 12 Hrs	406	246	172

Notes: Run-Times are based on new fully charged batteries at 25°C ambient.

Warranty/Support: AMETEK Powervar warrants the electronics and transformers used in its uninterruptible power supplies to be free from defects in materials and workmanship for a period of three years from the date of shipment. Batteries are warranted for a period of two years from the date of shipment for standby use; 90 days for cyclic use. For North American service or support on any AMETEK Powervar product, please contact AMETEK Powervar Technical Support at (800) 369-7179; in Illinois call (847) 596-7000. For service and support in EMEA, contact AMETEK Powervar in the United Kingdom at +44 (0) 1793 553980. To view the AMETEK Powervar Warranty Policy and Procedures visit www.powervar.com.