

AC Output Specifications

POWER	62.5kVA/50kW for each 3060-MS
VOLTAGE (Nominal)	Direct Coupled: 0-120/208V, 3-phase External Transformer Options: Consult factory for details.
CURRENT RMS	175 A _{RMS} /Phase continuous Pf < 0.8=175A _{RMS} /Phase Pf 1.0=140A _{RMS} /Phase
OVERLOAD (KW)	110% for 1 hour, 125% for 10 minutes, 150% for 10 seconds
FREQUENCY	50Hz, 60Hz or 400Hz Fixed settings 47 - 500 Hz Variable
VOLTAGE THD	< 1% max. Vthd at 50 or 60Hz < 2% max. Vthd at 400Hz
LOAD REGULATION	±1% @ 50/60Hz, ±2% @ 400Hz with Automatic Gain Control (AGC) enabled
LINE REGULATION	±1% maximum for ±10% line voltage change
LOAD TRANSIENT RESPONSE AND RECOVERY TIME	150 microseconds for 50% load step and 300 microseconds for 100% load step.
LOAD POWER FACTOR	Delivers full rated kVA into any Power Factor load.
LOAD BALANCE RESTRICTION	None. Each phase is independently regulated
ISOLATION	An input transformer with an electrostatic shield provides isolation between the input and output of the system.
OVER CURRENT PROTECTION	Integral electronic current limiting with auto recovery. Output Circuit Breaker is optional.

Measurements (with optional SCU/UPC32)

VOLTAGE (True RMS)	Range	0-354V _{L-N} 0-708V _{L-L}
	Resolution	0.1 VAC to front panel. 0.001 VAC to remote interface.
	Accuracy	±0.2% of range +cal.ref.
CURRENT (True RMS)	Range	4,000Apk
	Resolution	0.01A to front panel. 0.001A to remote interface.
	Accuracy	±0.2% of range +cal.ref.
POWER	Measures True Power (kW), Apparent Power (kVA) Power Factor and Crest Factor.	
	Range	1.4MW / 1.4MVA
	Resolution	1.0 Watt
POWER/CREST FACTOR	Calculated and displayed to three significant digits.	

Parameter Settings (with optional SCU/UPC32)

FREQUENCY	Range	20 to 1000 Hz
	Resolution	4 significant digits, e.g. 400.0
	Accuracy	±0.01%,
VOLTAGE	Range	0 to VMAX
	Resolution	0.1 VAC steps.
	Accuracy	±0.2% of range +cal.ref.
CURRENT LIMIT	Range	0 to I _{RMS} max
	Resolution	±0.05%
	Accuracy	±3%, FS
PROGRAMMABLE OUTPUT IMPEDANCE	Dynamic output impedance (Zo) is programmable, ± Zo, MAX in 0.1% steps. Zo value in milliohms and typically results in a ±10% change in output voltage at maximum rated load current.	

Input Power Requirements

INPUT VOLTAGE	208 VACΔ	240 VACΔ	380 VACΔ	400 VACΔ	416 VACΔ	480 VACΔ
	±10%	±10%	±10%	±10%	±10%	±10%
RECOMMENDED SERVICE CURRENT	175 A _{RMS}	175 A _{RMS}	100 A _{RMS}	100 A _{RMS}	100 A _{RMS}	80 A _{RMS}
INPUT FREQUENCY	47-63 Hz					
POWER FACTOR	0.85 lagging typical					
PROTECTION	Input CB Standard. Slow Turn-On Circuit is provided to limit inrush current					

Mechanical Specifications

HEIGHT	72" / 1829 mm
WIDTH	36" / 914 mm
DEPTH	30" / 762 mm
WEIGHT	1,557 lbs. / 715 kg
INSTALLATION CLEARANCE	36" at front of cabinet for service, 12" top, 0" side and rear

General Specifications

OPERATING TEMP	Operating: 0° to +40°C (32° to 104°F) – Storage: -10° to +70°C (+14° to +158°F)
RELATIVE HUMIDITY	0 to 95% non-condensing
NOISE LEVEL	65 dbA at 3 feet
EFFICIENCY	85 % typical at full load
COOLING/ VENTILATION	Self-Contained fans; bottom intake, top exhaust, 1200 CFM.
HEAT DISSIPATION AT FULL LOAD	20 kBTU/HR (6 kW/HR)
SERVICE ACCESS	Unit is designed for front access. Power Cabling is routed through either top or bottom knock-outs.
CERTIFICATION	CE, ETL (Optional)
ALTITUDE	Operating 6000 Ft. Storage 40,000 Ft.

Protection and Safety

	AC Power Source is protected against Overcurrent, Short Circuit, and Overtemperature.
AUDIBLE & VISUAL ALARMS	Alter operator to any conditions requiring attention.

Typical MS Options

/CE	CE Mark. Includes Output Circuit Breaker (/OCB)
/CSTB	Casters
/OCB	Output Circuit Breaker
/M99575	Split Phase Output Configurations (50 kw)
/M99583	Split Phase Output Configurations (32 kw)

Options for SCU/UPC32 Equipped MS Systems Only

/G	GPIO Interface, SCPI Commands & IEEE488.2 (standard)
/S	RS232 Interface. SCPI Commands, Baudrate up to 38.4 kbps. (Replaces GPIO, no cost option)
UPC-Studio	Windows AC Power Source control Software (no cost option) UPC Test Manager License (cost option) required for Avionics or IEC test options listed below:
ABD0100	License for Avionics Test Sequences according to norm ABD0100.8.1. Requires UPC-Test Manager Option.
A350	License for Avionics Test Sequences according to norm Airbus A350. Requires UPC-Test Manager Option.
DO160	License for Avionics Test Sequences according to norm DO160 Version E - Requires UPC-Test Manager Option.
IEC-AC-4XX	IEC 61000-4 AC Immunity Test Sequences. Includes 4-11, 4-14, 4-27, 4-28 and 4-34. Excludes 4-13 Option.
SCU/UPC32-413	IEC 61000-4-13 Inter Harmonic Generator. Required to run 4-13 tests. Includes 4-13 software.
DRIVERS	LabView™ and LabWindows™ drivers available

UMS Option

MS Series Battery Support Systems

With the addition of the UMS Battery Backup option, the 3060-MS can be converted to an uninterruptible Power Source (UPS). The UMS battery support system for a single cabinet UMS installation (62.5 kVA, 50 kW) consists of 30 sealed, maintenance free, immobilized electrolyte batteries installed in a Zone 4 cabinet. The UMS system DC voltage regulator provides for automatic charging of the battery system to maintain the proper float voltage.

A battery disconnect is located in the center of the battery cabinet front door. Battery support time at full load (50 kW) is approximately 15 minutes. The waveform quality at the end of the battery support time meets the requirements of MIL-STD 1399, section 300A, Types I, II and III power forms.

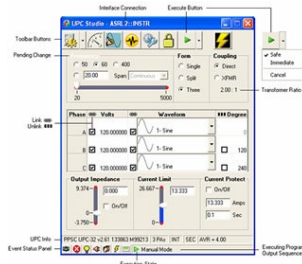
On-Line, No-Risk Battery Test

This feature of the UMS system provides the ability to perform a battery test on command from the front panel or RS-232 serial port. Test results are displayed on the front panel and are available over the serial port as a part of the system diagnostics. A battery failure during the test will not cause the system to drop the load or distort the output waveform.

UPC Manager Software Suite

Master the Power of the Wave!

UPC Manager Software gives you the tools necessary to quickly and easily operate your AC Power Source. With our complete, graphical interface, control all areas of your AC Power Source testing with simple presets, user prompts, test sequences, test plans and custom reports.



UPC Features

- Simple and Comprehensive programming
- Execute and Monitor the output values using the internal power analyser
- Create arbitrary waveforms, import waveforms captured on external instruments, freehand draw, enter harmonic and phase angle content, create ringwaves, random noise, clipping and other custom waveshapes.

SCU-UPC32 Programmable Controller



The UPC controller is a 3-Phase AC arbitrary waveform generator and precision AC metering system. Each waveform stored in the UPC is encoded with 12-bit amplitude and 10-bit time resolution for each cycle. The waveform for each phase may be independently selected and varied in amplitude and phase angle with respect to phase A. The UPC output metering samples the output volts and amps at 512 samples per measurement using a 12-bit A/D converter. This technique provides exceptional metering accuracy and resolution (20 bits), and delivers a high-fidelity waveform back to a host computer for analysis. The UPC includes a remote GPIB interface compatible with IEEE488.2 and SCPI.



17692 Fitch, Irvine, CA 92614 USA
 Phone: +1 949.251.1800
 Fax: +1 949.756.0756
 Toll Free: 800.854.2433
 E-mail: sales@pacificpower.com
 www.pacificpower.com

The Leader in AC Power Technology

As a privately held, leading manufacturer of high-quality AC Power Conversion Equipment, Pacific Power Source, Inc. offers standard catalog products that range in power from 500 VA to >625 kVA. Low-power products include frequency converters and Programmable AC Power Sources. High-power systems include programmable power test equipment, frequency converters and uninterruptible AC Power Sources.

Founded in 1971, the Irvine, California, company was an early pioneer in the development of linear solid-state power conversion for use in high-reliability applications. The company now manufactures both advanced linear and broadband switching types of AC Power Sources.

