CW Series

8高道56W125M5供成成MABLE AC POWER SERIES

Features

- Three phase operation
- High frequency output
- Advance measurement capability (CWP only)
- Wide AC input range
- Excellent output stability



Product Overview

The Continuous Wave (CW) series of AC power sources provides clean single phase power at an impressive price/performance ratio. These compact switch mode sources come in two series, manual (CW-M) or programmable (CW-P) with standard IEEE-488.2 and RS232 control. Both series have three power levels, 800VA, 1250VA and 2500VA. The 800 and 1250VA models are 2RU high and allow the unit under test to be connected to the front or rear panel. The 2500VA model is 3RU high with rear panel output connections. All models can be operated in a bench-top or rack-mount configuration.

The front panels have two bright four digit, seven segment displays. Power Factors Corrected (PFC) universal input voltage allows maximum to be delivered from an AC outlet without user selecting the range. Fully rated current is delivered for either output voltage range of 135VAC or 270VAC over a standard frequency range of 45-500Hz. Custom output voltage are available (consult Powerbox for details). Both series can be operated in parallel or three phase configurations.

A separate output on/off switch controls power to the load. Remote voltage sense is standard. Transformer coupled output is protected against over-voltage and over-current. The unit is also protected against over-temperature conditions. A two-speed fan results in quieter operation at lower power levels. All models are CE marked.

Product Applications

The Continuous Wave is designed for testing single or poly-phase electronics. The CW is well suited for applications requiring a cost-effective low profile AC source.

APPLICATION INCLUDE:

- Testing for real world sine wave power conditions
- 400Hz testing for avionics equipment (50/60Hz margin testing)
- · Ballast testing (Components testing)
- Power supply testing for AC to DC converters

Manual CW Features and Benefits

The manual series front panel knobs (10 turn potentiometers) allow quick adjustment of voltage, current and frequency settings. Frequency and voltage can be programmed remotely using a 0-5V analog signal. LED's indicate: output-on, voltage or current mode operation, fault and slave modes. Models can also be paralleled in the field or configured for three phase operation using factory supplied optional cables. Current shutdown or fold-back modes can be selected from rear panel switch.

Programmable CW Features and Benefits

Front panel encoder knobs allow programming of voltage, current and frequency settings. Programmed or measured values can be viewed on the two LED displays through push button selection. Menu push buttons enable setting system configuration including parallel or three phase operations. This menu also allows setting current shutdown of fold-back modes. Remote IEEE-488.2 and RS232 control interfaces are standard. LEDs indicate high and low range output voltage, measure a program mode, voltage a current mode generation and output on. Also indicate menu/status, remote control, lockout and fault conditions. Digital Signal Processing (DSP) based measurements include voltage, current (amperes, peak amperes, crest factors), power (watts, VA and power factor) and frequency.



CW Series

CW SPECIFICATIONS	MANUAL (M)	PROGRAMMABLE (P)				
GENERAL						
REGULATORY COMPLIANCE	ICE CE mark					
DIMENSIONS						
CW 801 and CW 1251	2RU 89mm (H) x 483mm (W) x 524mm (D)					
CW 2501	3RU 133mm (H) x 483mm (W) x 524mm (D)					
WEIGHT						
CW 801	22kg					
CW 1251	24kg					
CW 2501	39kg					
SHIPPING WEIGHT						
CW 801	25kg					
CW 1251	28kg					
CW 2501	43kg					
ENVIRONMENTAL						
Cooling	Dual speed fan with side air intake, exhaust to rear					
Operating Temperature	0 to 40 °C					
Storage Temperature	-40°C to +70 °C					
Humidity	0 to 85% at 25 °C de-rate to 50% at 40 °C (non condensing)					
Altitude	Operating full power available up to 6,000 feet, non operating to 40,000 feet					

ORDERING INFORMATION

MODEL NUMBER	OUTPU	T (SINGLE PHASE)		INPUT (SINGLE PHASE)
MODEL NUMBER	MAXIMUM POWER	MAXIMUM CURRENT		
		135V	270V	VOLTAGE (47-63HZ)
CW-Manual				
CW 801M	800VA	6.0A	3.0A	90 to 264VAC
CW 1251M	1250VA	9.4A	4.7A	103 to 264VAC
CW 2501M	2500VA	18.6A	9.3A	180 to 264VAC
CW-Programmable				
CW 801P	800VA	6.0A	3.0A	90 to 264VAC
CW 1251P	1250VA	9.4A	4.7A	103 to 264VAC
CW 2501P	2500VA	18.6A	9.3A	180 to 264VAC

Options and Accessories

H: Expanded frequency range 45 to 1000Hz (CW-P only)

L: Locking shafts (front panel potentiometers) (CW-M only)

S: Sync In/Out (clock/lock) (standard on CW-P)

V: Extended voltage range 0-155V, 0-310V (CW-P only)

RACK SLIDE KIT

Part No. K16570-01

MULTI-UNIT CABLE

Part No. 890-497-40

Required for parallel and parallel polyphase CW-M and CW-P systems.

DIGITAL EXPANSION CABLE

Part No. 890-499-00 (CW-P only)

Required for parallel and paralled polyphase CW-P systems.

CW Series ® 意思的概算的表現 MABLE AC POWER SERIES

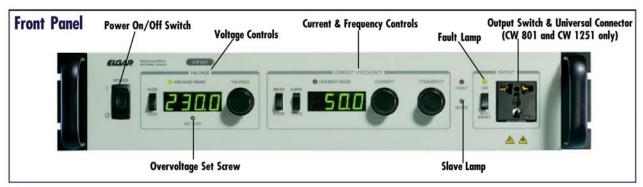
CW SPECIFICATIONS	MANUALS (M)	PROGAMMABLE (P)		
Peak Current*Range CW 801		0 to 25A		
CW 1251		0 to 35A		
CW 2501		0 to 70A		
Accuracy		+/-2% of range		
Resolution		0.1A		
FREQUENCY	45 . 5001. (45 40001)			
Range		onal on programmable unit only)		
Accuracy	+/-0.5% of reading	+/-0.02% of value		
Resolution of display POWER*		D.1Hz		
Range				
CW 801		0 to 800W		
CW 1251		0 to 1250W		
CW 2501		0 to 2500W		
Accuracy		+/-2% of range for linear loads		
Resolution		1 W		
APPARENT POWER*				
Range CW 801		0 to 800 VA		
CW 1251		0 to 1250 VA		
CW 2501		0 to 2500 VA		
Accuracy		+/- 2% of range for linear loads		
Resolution		1 VA		
POWER FACTORS* Range		0 to 1		
Accuracy		+/- 4 % of range for linear		
Resolution		0.01		
CREST FACTORS*				
Range		0 to 3.5		
Accuracy		+/-5% of range		
Resolution		0.01		
	FRONT PANEL			
DISPLAYS & INDICATORS				
Menu/ Status	Green LED for output on, V mode, I mode, slave Red LED for Fault	Green LED's for remote and lockout, voltage mode, current mode, red LED for fault Enter/escape buttons are present for programming		
Voltage	4 digit display, green LED (volts)	4 digit display green LED (volts, watts, VA, PF, OVP)		
Current/ Frequency	4 digit display, green LED (amperes)	4 digit display green LED (amps, Hz, Pk amps, CF, I limit		
Program/Measure	4 digit display, green LED (differes)	Green LED (amps, HZ, I k dinps, ci, I limit)		
V Range High/Low		Green LED		
INPUT VOLTAGE AND FREQUENCY CW 801	90 to 264VAC, 47	to 63Hz, single-phase		
CW 1251		103 to 264VAC, 47 to 63Hz, single-phase		
CW 2501		180 to 264VAC, 47 to 63Hz, single-phase		
CURRENT				
CW 801		13 ARMS max		
CW 1251	18.5 ARMS max			
CW 2501		19.5 ARMS max		
Power Factor	> 0.99 typical at full load nominal line			
Efficiency		ical at full load		

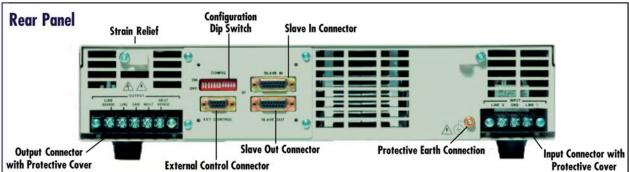


CW SPECIFICATION	MANUAL (M)	PROGRAMMABLE (P)	
	ОИТРИТ		
POWER CW 801		800VA	
CW 1251	1250VA		
CW 2501	2500VA		
Power factor of load	0 lag to 0 lead		
Phase	All mode	ls single phase output	
VOLTAGE			
Ranges	0-135VRMS or 0 to 275VRMS, user selectable (consult factory for custom output voltages)		
Accuracy	+/-1% of range (> 5VAC out)	+/-0.1% of range < 100Hz, +/-0.2% of range,> 100Hz (>5 VAC out)	
Resolution		0.1VRMS	
Total harmonic distortion	0.25% typical < 100	Hz add 0.5%/100Hz above 100Hz	
AC noise level	< 50 mVRMS typical for CW801 & CW1251, 100 mVRMS typical for CW2501		
Amplitude stability	+/-0.1% of full scale over 8 hours at constant line, load and temperature after 15 minute warm-up typical temperature after 15 minutes warm-up typical		
Load regulation	+/-0.1% of full scale voltage for a full resistive load to no load (<10 mVRMS typical, measured at point of sense)		
Line regulation	+/-0.1% of full scale voltage for a +/-10% line change from nominal line voltage (<5 mVRMS typical, measured at point of sense)		
Remote voltage sense	Compensation for up	to 5 VRMS total lead voltage drop	
CURRENT CW 801	6.0 ADMS in 125\/AC r	ange or 2.0 APMS in 270 VAC range	
CW 801 CW 1251	6.0 ARMS in 135VAC range or 3.0 ARMS in 270 VAC range		
CW 2501	9.4 ARMS in 135VAC range or 4.7 ARMS in 270VAC range 18.6 ARMS in 135VAC range or 9.3 ARMS in 270VAC range		
Accuracy	+/-0.5% typical	+/-0.6% max	
Resolution	0.1 ARMS	0.01 ARMS	
FREQUENCY			
Range	45 to 500Hz(45 to 1000Hz	z optional on programmable unit only)	
Accuracy	+/-0.5% typical +/-0.02% max		
Resolution	0.1Hz 0.1Hz for remote programming		
PHASE ANGLE Range		-359 to +359 degrees. Positive phase indicates time lag from reference	
Accuracy		Within 100 microseconds of equivalent angle	
Resolution		1 degree	
	MEASUREMENT		
Voltage range		0-270 VRMS	
Accuracy	+/-1% of full range for voltage (>5VAC out), measure point of sense	d at +/-0.1% of range < 100Hz, +/-0.2% of range >100Hz, measured at point of sense (> 5VAC out)	
Resolution		0.1 VRMS	
Current*			
Range CW 801	C	to 6.0 ARMS	
CW 125I	0 to 9.4ARMS		
CW 2501	0 to 18.6ARMS		
Accuracy	+/-2% of range for linear loads with current +/-0.6% of range for linear loads with current 0.2A for 800VA & 1200VA, 0.4A for 2500VA 0.2A for 800VA & 1200VA, 0.4A for 2500VA		
Resolution	0.1ARMS	0.01 ARMS	

CW Series

Technical Illustrations **CW MANUAL**





CW PROGRAMMABLE

