

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

AMETEK/ELGAR

Ametek / Elgar CW801M AC Power Supply

Sorensen Elgar CW801M ContinuousWave AC Power Source 800 VA The Elgar/Sorensen CW801M is the manual ContinuousWave 800 VA single phase AC power source with 0 to 135 Vrms and 0 to 270 Vrms ranges. OEM CW Series datasheet rates 45 to 500 Hz output, PFC input 90 to 264 VAC, power factor greater than 0.99 typical, and front or rear UUT connections in a 2U chassis. 50/60 Hz margin testing, 400 Hz avionics AC sourcing, ballast and component testing, and AC to DC converter power supply testing needing clean sinewave AC. The Elgar/Sorensen CW801M is the manual ContinuousWave 800 VA single phase AC power source with 0 to 135 Vrms and 0 to 270 Vrms ranges. OEM CW Series datasheet rates 45 to 500 Hz output, PFC input 90 to 264 VAC, power factor greater than 0.99 typical, and front or rear UUT connections in a 2U chassis. 50/60 Hz margin testing, 400 Hz avionics AC sourcing, ballast and component testing, and AC to DC converter power supply testing needing clean sinewave AC. Manual 10 turn voltage current and frequency potentiometers



MODEL

**Ametek/Elgar
CW801M**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

CW801M

LISTING

<https://aumictechlabs.com/products/cw801m-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Ametek/Elgar CW801M is an 800 VA single-phase AC power supply engineered for precision power simulation and equipment testing across a broad range of voltage and frequency conditions. This manual-control unit delivers programmable output from 0 to 135 Vrms or 0 to 270

Vrms with frequency adjustment spanning 45 Hz to 500 Hz, making it ideal for validating device performance under variable power scenarios. The ContinuousWave (CW) Series design combines switch-mode efficiency with compact 2U rackmount form factor, achieving typical efficiency >73% at full load while maintaining output accuracy of $\pm 1\%$ for loads exceeding 5 VAC and $\pm 2\%$ across the full range. Low total harmonic distortion of 0.25% typical below 100 Hz, coupled with 0.99 eliminates manual range selection and maximizes power delivery without external conditioning.

Technical Specifications
Power Rating: 800 VA, single-phase
Input Voltage: 90 to 264 VAC; 47 to 63 Hz (extended range 45 to 500 Hz available)
Output Voltage: 0 to 135 Vrms or 0 to 270 Vrms user selectable; 0.1 Vrms resolution
Output Current: 6.00 ARMS (135 VAC range), 3.00 ARMS (270 VAC range), maximum 13 ARMS
Output Frequency: 45 Hz to 500 Hz programmable
Output Accuracy: $\pm 1\%$ of range (load current >5 VAC), $\pm 2\%$ of range (current >0.2 A)
Voltage Regulation: $\pm 0.1\%$ of full scale (load and line regulation), <10 mVRMS typical
Total Harmonic Distortion: 0.25% typical below 100 Hz; +0.5%/100 Hz above 100 Hz
AC Noise: 0.99 at full load nominal line
Efficiency: >73% at full load
Cooling: Two-speed fan for reduced noise at partial load
Dimensions: 2U (3.5"), 19" W $\times$ 20.07" D
Weight: 48 to 86 lbs (22 to 40 kg)

Key Features
Remote voltage sense standard; transformer-coupled output with overvoltage, overcurrent, and overtemperature protection
10-turn potentiometer controls for voltage, current, and frequency adjustment
0 to 5 V analog programming interface for remote voltage and frequency control
Dual four-digit, seven-segment LED displays for output monitoring
Status indicators for output-on, mode selection, fault, and slave operation
Benchtop or 19" rackmount configuration; two-person lift recommended

Typical Applications
Sensitivity testing to voltage and frequency variations
Power conditioning simulation for equipment validation
AC load testing and power source simulation
Precision laboratory and production test environments

Compatibility & Integration
Analog programming via 0 to 5 V control signal enables integration into automated test systems. Separate output on/off switch provides independent power control. Universal input accommodates global voltage standards without reconfiguration.

CW801M Characteristics / Specifications

PARAMETER	VALUE
Output Power	800 VA
Output Voltage Ranges	0 to 135 Vrms and 0 to 270 Vrms user selectable
Voltage Accuracy Greater Than 5 Vac	plus or minus 1 percent of range
Voltage Resolution	0.1 Vrms
Output Current 135 Vac Range	0 to 6.0 Arms
Output Current 270 Vac Range	0 to 3.0 Arms
Current Accuracy Typical	plus or minus 0.5 percent
Current Resolution	0.1 Arms
Frequency Range	45 to 500 Hz
Frequency Accuracy Typical	plus or minus 0.5 percent
Frequency Resolution	0.1 Hz
Total Harmonic Distortion Typical Below 100 Hz	0.65 percent class
AC Noise Level Typical	less than 50 mVrms
Amplitude Stability	plus or minus 0.1 percent of full scale
Load Regulation	plus or minus 0.1 percent of full scale voltage
Line Regulation	plus or minus 0.1 percent of full scale voltage
Remote Sense Drop	5 Vrms total lead voltage drop
AC Input Voltage	90 to 264 VAC
AC Input Current Max	13 Arms
AC Input Frequency	47 to 63 Hz
Power Factor Typical Full Load	greater than 0.99
Efficiency Typical Full Load	greater than 73 percent
Operating Temperature	0 C to 40 C
Size Height	3.5 in

PARAMETER	VALUE
Weight	22 kg

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 C to 40 C
Operating Temperature	0 C to 40 C
Size Height	3.5 in
Weight	22 kg Notes Numeric rows from Elgar ContinuousWave Series 800 to 2500 VA datasheet column for CW 801M. Also branded under Sorensen/AMETEK Programmable Power.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Specifications	
PARAMETER	VALUE
Output Power	800 VA
Output Voltage Ranges	0 to 135 Vrms and 0 to 270 Vrms user selectable
Voltage Accuracy Greater Than 5 Vac	plus or minus 1 percent of range
Voltage Resolution	0.1 Vrms
Output Current 135 Vac Range	0 to 6.0 Arms
Output Current 270 Vac Range	0 to 3.0 Arms
Current Accuracy Typical	plus or minus 0.5 percent
Current Resolution	0.1 Arms
Frequency Range	45 to 500 Hz
Frequency Accuracy Typical	plus or minus 0.5 percent
Frequency Resolution	0.1 Hz
Total Harmonic Distortion Typical Below 100 Hz	0.65 percent class
AC Noise Level Typical	less than 50 mVrms
Amplitude Stability	plus or minus 0.1 percent of full scale
Load Regulation	plus or minus 0.1 percent of full scale voltage
Line Regulation	plus or minus 0.1 percent of full scale voltage
Remote Sense Drop	5 Vrms total lead voltage drop
AC Input Voltage	90 to 264 VAC
AC Input Current Max	13 Arms
AC Input Frequency	47 to 63 Hz
Power Factor Typical Full Load	greater than 0.99
Efficiency Typical Full Load	greater than 73 percent
Operating Temperature	0 C to 40 C
Size Height	3.5 in
Weight	22 kg

Notes

Numeric rows from Elgar ContinuousWave Series 800 to 2500 VA datasheet column for CW 801M. Also branded under Sorensen/AMETEK Programmable Power.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 14, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.