

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

AMETEK/ELGAR

Ametek / Elgar 251B Single Phase Output AC Power Source

The Sorensen 251B is a classic Sorensen laboratory DC power supply in the 250-series family. OEM Sorensen catalog literature positions 251B-class supplies for regulated benchtop DC sourcing with metered controls and CV/CC operation. Laboratory DC bias, educational and R&D bench power, and general purpose regulated DC sourcing matched to the faceplate ratings. Sorensen 250-series regulated DC architecture Instrument Family: Sorensen 251B DC power supply Laboratory DC bias, educational and R&D bench power, and general purpose regulated DC sourcing matched to the faceplate ratings. Sorensen 250-series regulated DC architecture Instrument Family: Sorensen 251B DC power supply Metering: voltage and current meters class



MODEL

Ametek/Elgar 251B

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

251B

LISTING

<https://aumictechlabs.com/products/251b-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Ametek/Elgar 251B is a solid-state linear AC power source delivering 250 VA single-phase output across three programmable voltage ranges. This frequency-agile instrument generates stable, low-distortion sine waves for benchtop and 19-inch rackmount applications, functioning as a versatile frequency converter and power simulator for demanding test environments. Technical Specifications Power & Voltage Output power: 250 VA Output voltage ranges: 0–32 VAC, 0–130

VAC, 0–260 VAC Input: 115 VAC $\pm 10\%$ or 230 VAC $\pm 10\%$, 47–63 Hz, single phase Frequency & Distortion Output frequency: 45 Hz to 5 kHz at full rated power; 5 kHz to 10 kHz at half power; optionally expandable to 10 kHz Harmonic distortion: typically $<0.3\%$ midband; typically $<0.6\%$ across full frequency range Frequency control via fixed, variable, or programmable oscillators (sold separately); tolerances to $\pm 0.0001\%$ available Physical & Environmental Form factor: benchtop or 19-inch rackmount Dimensions: 5.25" H $\times$ 19" W $\times$ 16" D Weight: 70 lbs Enclosure: aluminum (benchtop) or steel (rackmount with slide-out capability) Key Features Continuous duty operation at 150% rated capacity; 100% capacity into linear resistive loads Overload and over-temperature protection Clean sine wave output suitable for linear loads and ATE systems Modular design supports single, dual, and three-phase configurations when combined with routing plug-ins and oscillators Typical Applications Linear load testing and power supply validation Automatic Test Equipment (ATE) integration Avionics testing (including 400 Hz operation) AC frequency conversion (50 Hz $\leftrightarrow$ 60 Hz) Bench research and development Compatibility & Integration The 251B operates as a building block in multi-phase systems. Documented configurations include System 500-1 (2 $\times$ 251B, 500 VA single-phase at 65/130/260 VAC), System 500-2 (250 VA per phase dual configuration), System 500-30 (166 VA per phase three-phase open-delta), and System 500-3Y (166 VA per phase three-phase phantom-wye).

251B Characteristics / Specifications

PARAMETER	VALUE
Instrument Family	Sorensen 251B DC power supply
Operating Modes	CV/CC class
Metering	voltage and current meters class
Front Panel Controls	voltage and current
Form Factor	benchtop
AC Input	mains powered selectable voltage class
Topology	series regulated class on 250 series
Status Indicators	CV/CC class
Output Terminals	front binding posts class
Floating Output Class	yes within ratings
Current Limit	yes
Voltage Limit	yes
Cooling	convection class
Operating Temperature Class	laboratory
Series Family	Sorensen 250
Load Regulation Class	specified on model table
Line Regulation Class	specified on model table
Ripple Class	specified on model table
Transient Response Class	specified on model table
Stability Class	specified on model table
Remote Sense Path	configuration dependent on series
OVP Path	configuration dependent on series
Weight Class	benchtop laboratory supply
Operating temperature	Class: laboratory

251B Specifications

PARAMETER	VALUE
Sorensen 251B DC Power Supply	Overview
Key Features	Sorensen 250-series regulated DC architecture
Metered voltage and current class	CV/CC automatic crossover class
Technical Specifications	Instrument Family: Sorensen 251B DC power supply

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: laboratory
Operating Temperature	Class: laboratory
Operating Temperature Class	laboratory
Series Family	Sorensen 250
Load Regulation Class	specified on model table
Line Regulation Class	specified on model table
Ripple Class	specified on model table
Transient Response Class	specified on model table
Stability Class	specified on model table
Remote Sense Path	configuration dependent on series
OVP Path	configuration dependent on series
Weight Class	benchtop laboratory supply Notes Identity and family capability rows from Sorensen 251B / 250-series catalog literature. Confirm exact V/I ratings on the unit faceplate and manual before quoting numeric limits.

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
Instrument Family	Sorensen 251B DC power supply
Operating Modes	CV/CC class
Metering	voltage and current meters class
Front Panel Controls	voltage and current
Form Factor	benchtop
AC Input	mains powered selectable voltage class
Topology	series regulated class on 250 series
Status Indicators	CV/CC class
Output Terminals	front binding posts class
Floating Output Class	yes within ratings
Current Limit	yes
Voltage Limit	yes
Cooling	convection class
Operating Temperature Class	laboratory
Series Family	Sorensen 250
Load Regulation Class	specified on model table
Line Regulation Class	specified on model table
Ripple Class	specified on model table
Transient Response Class	specified on model table
Stability Class	specified on model table
Remote Sense Path	configuration dependent on series
OVP Path	configuration dependent on series
Weight Class	benchtop laboratory supply
Notes	
Identity and family capability rows from Sorensen 251B / 250-series catalog literature. Confirm exact V/I ratings on the unit faceplate and manual before quoting numeric limits.	

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.