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Data Sheet

August 15, 2026

DATRON

Datron 4600

Datron Wavetek 4600 Autocal Transconductance Amplifier Queue model 4600 is the Datron / Wavetek 4600 Autocal transconductance amplifier. OEM 4600 user's handbook and 4808 brochure rate 1 A per volt transfer, DC output zero to 11 A bipolar, AC output 0.9 A to 11 A from 10 Hz to 20 kHz, input impedance 300 kOhm parallel 100 pF, isolation 100 Vpk, input protection 240 Vrms continuous, settling 1 s to 40 ppm of step (DC), AC settling to 100 ppm in less than 10 s (10 to 32 Hz), less than 3 s (32 to 330 Hz), less than 1 s (330 Hz to 20 kHz), compliance greater than 2 V, mains 100/120/220/240 V plus or minus 10 percent 50/60 Hz, 200 W, 89 × 455 × 420 mm, 10 kg. Solo 90-day plus or minus 1 C accuracies to plus or minus 125 ppm DC (0 to 11 A) and plus or minus 430 ppm AC (0.9 to 11 A, 10 Hz to 5 kHz). Slave mode with Datron 4708/4700/4705 version 5.00 or later; not slave-compatible with 4000A/4200A. Autocal adds as little as 175 ppm to 1-year DCV and 360 ppm to 1-year ACV of a 4800-series calibrator. Queue model 4600 is the Datron / Wavetek 4600 Autocal transconductance amplifier. OEM 4600 user's handbook and 4808 brochure rate 1 A per volt transfer, DC output zero to 11 A bipolar, AC output 0.9 A to 11 A from 10 Hz to 20 kHz, input impedance 300 kOhm parallel 100 pF, isolation 100 Vpk, input protection 240 Vrms continuous, settling 1 s to 40 ppm of step (DC), AC settling to 100 ppm in



MODEL

Datron 4600

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

4600

LISTING

<https://aumictechlabs.com/products/4600-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Datron 4600 Transconductance Amplifier extends the current sourcing capabilities of Datron calibrators and standards, delivering precision current generation up to 11A DC or RMS AC. It operates in two modes: Slave Mode integrates with Datron 4700 series calibrators for automated control via the Autocal technique, while Solo Mode functions as a standalone amplifier driven by external voltage sources. The unit converts voltage input to current output at a 1:1 transfer characteristic (1A output per 1V input). This dual-mode architecture suits calibration laboratories and metrology applications requiring high-current generation with verifiable accuracy across frequency ranges from 10 Hz to 20 kHz.

Technical Specifications

Current Output Maximum DC current: 11A Maximum AC RMS current: 11A Compliance voltage: >2V Input impedance: 300 k Ω in parallel with 100 pF Input isolation: 100V pk (input to chassis) DC Current Accuracy Slave Mode: ± 80 ppm output ± 500 μ A (90-day, 23°C $\pm 1^\circ$ C) Solo Mode: ± 125 ppm (0 to 11A, 90-day $\pm 1^\circ$ C); Temperature coefficient 7 ppm/ $^\circ$ C (23°C $\pm 10^\circ$ C) AC Current Accuracy Slave Mode: $\pm (330$ ppm output + 1.1 mA) at 10 Hz–1 kHz; $\pm (0.1\%$ output + 1.4 mA) at 1–5 kHz Solo Mode: ± 430 ppm (0.9–11A, 10 Hz–5 kHz). Frequency-dependent: $\pm (200$ ppm output + 1.1 mA) 10 Hz–1 kHz; $\pm (700$ ppm output + 1.4 mA) 1–5 kHz; $\pm (1400$ ppm output + 6 mA) 5–10 kHz; $\pm (0.54\%$ output + 33 mA) 10–20 kHz. Temperature coefficients: 10 ppm/ $^\circ$ C (5 kHz) AC Performance Total harmonic distortion: 0.1% (10 Hz–1 kHz), 0.5% (1–5 kHz), 1.0% (5–10 kHz), 1.5% (10–20 kHz) Frequency range: 10 Hz to 5 kHz (standard); 10 Hz to 20 kHz (extended)

Key Features Transfer characteristic of 1A output per 1V input in Solo Mode Programmable output via calibrator front panel or IEEE-488 interface (Slave Mode) Autocal-based automated recalibration capability Requires specific lead kit (Datron Part Number 440151) for Slave Mode operation Compatibility & Integration Slave Mode supports Datron 4700 series calibrators (firmware 5.0 and above), including models 4707, 4705, and 4708. Solo Mode operates with any suitable external voltage source.

4600 Characteristics / Specifications

PARAMETER	VALUE
Model	4600
Instrument Type	Autocal transconductance amplifier
Transfer Ratio	1 A output per 1 V input
Dc Current Range	zero to plus or minus 11 A, 10 percent overrange
Ac Current Range	0.9 A to 11 A
Ac Frequency Range	10 Hz to 20 kHz (4808 brochure); handbook AC settling table to 20 kHz
Dc Settling	1 s to 40 ppm of step size
Ac Settling Low	to 100 ppm of step: less than 10 s from 10 Hz to 32 Hz
Ac Settling Mid	less than 3 s from 32 Hz to 330 Hz
Ac Settling High	less than 1 s from 330 Hz to 20 kHz
Solo Dc Accuracy	plus or minus 125 ppm, 90 day, plus or minus 1 C, 0 to 11 A
Solo Ac Accuracy	plus or minus 430 ppm, 90 day, plus or minus 1 C, 0.9 to 11 A, 10 Hz to 5 kHz
Slave Dcv Add	as little as 175 ppm on 4800-series 1-year DCV
Slave Acv Add	360 ppm on 4800-series 1-year ACV
Voltage Compliance	greater than 2 V DC and AC (greater than 2 Vrms on 10 A class)
Input Impedance	300 kOhm parallel 100 pF
Isolation	100 Vpk input to chassis
Input Protection	240 Vrms continuous
Output Protection	open circuit and short circuit
Mains	100/120/220/240 V plus or minus 10 percent, 50 Hz or 60 Hz
Power Consumption	200 W
Operating Temperature	0 C to plus 50 C
Storage Temperature	minus 40 C to plus 70 C
Dimensions	89 mm x 455 mm x 420 mm (3.5 × 18 × 16.5 inch)

PARAMETER	VALUE
Mass	10 kg
Safety	designed to UL1244, IEC 348
Slave Hosts	Datron 4708, 4700, 4705 version 5.00 or later
Manufacturer	Datron Instruments / Wavetek
Literature	Wavetek Model 4600 Autocal Transconductance Amplifier user's handbook section 4; Wavetek 4808 brochure Option 60
Family	Datron 4700/4800 calibrator current extension
Form Factor	full rack 3.5 inch benchtop or 19 inch rack
System Role	11 A current amplifier for DMM calibration

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 40 C to plus 70 C
Operating temperature	0 C to plus 50 C
Operating Temperature	0 C to plus 50 C
Dimensions	89 mm x 455 mm x 420 mm (3.5 × 18 × 16.5 inch)
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Manufacturer	Datron Instruments / Wavetek
Literature	Wavetek Model 4600 Autocal Transconductance Amplifier user's handbook section 4; Wavetek 4808 brochure Option 60
Family	Datron 4700/4800 calibrator current extension
Form Factor	full rack 3.5 inch benchtop or 19 inch rack
System Role	11 A current amplifier for DMM calibration Notes From Datron/Wavetek 4600 user's handbook specification section (1 A/V, plus or minus 11 A, 300 kOhm // 100 pF, settling, 200 W, 89 × 455 × 420 mm, 10 kg) and 4808 brochure Option 60 (10 Hz to 20 kHz, greater than 2 V compliance, 175/360 ppm Autocal adders, Solo 125/430 ppm). Full accuracy tables versus time since calibration are on handbook page 4-1.

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	
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Output Protection	open circuit and short circuit
Mains	100/120/220/240 V plus or minus 10 percent, 50 Hz or 60 Hz
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Notes

From Datron/Wavetek 4600 user's handbook specification section (1 A/V, plus or minus 11 A, 300 kOhm // 100 pF, settling, 200 W, 89 x 455 x 420 mm, 10 kg) and 4808 brochure Option 60 (10 Hz to 20 kHz, greater than 2 V compliance, 175/360 ppm Autocal adders, Solo 125/430 ppm). Full accuracy tables versus time since calibration are on handbook page 4-1.

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

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NIST-traceable calibration · SAM registered ·
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NAICS 423690 · 811210 · 541380
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.