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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 6186C DC Power Supply

Agilent 6186C DC Current Source 0 to 100 mA 300 V The HP 6186C is a high-voltage constant-current source with three ranges to 100 mA at up to 300 V compliance. OEM product summaries list 0-1 mA, 0-10 mA and 0-100 mA, load regulation less than 25 ppm plus 5 ppm of range, 4 ms or less transient recovery, and 10 ms output programming speed. High-voltage current bias of devices and circuits needing up to 300 V compliance. Instrument Type: DC constant current source The HP 6186C is a high-voltage constant-current source with three ranges to 100 mA at up to 300 V compliance. OEM product summaries list 0-1 mA, 0-10 mA and 0-100 mA, load regulation less than 25 ppm plus 5 ppm of range, 4 ms or less transient recovery, and 10 ms output programming speed. High-voltage current bias of devices and circuits needing up to 300 V compliance. Instrument Type: DC constant current source Load Regulation: less than 25 ppm plus 5 ppm of range switch setting



MODEL

**Agilent / Keysight
6186C**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

6186C

LISTING

<https://aumictechlabs.com/products/6186c-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 6186C is a precision DC current source engineered for demanding semiconductor characterization, resistivity measurement, and electrochemistry applications. It delivers stable, programmable current output with remote control capabilities and exceptional load regulation across three selectable ranges. Technical Specifications Output Characteristics Output current ranges: 0-1 mA, 0-10 mA, 0-100 mA Maximum output voltage: 300 V DC Maximum output

power: 30 W High output impedance architecture eliminates output capacitors Full rated current delivery at maximum voltage with adjustable voltage limit throughout output range Performance & Stability Load regulation: <25 ppm of initial value plus 5 ppm of range switch setting; <100 nA for positive output grounded operation Line regulation: <25 ppm of initial value plus 5 ppm of range switch setting across 104–127 Vac or 208–254 Vac inputs Temperature coefficient: <75 ppm/°C of output plus 5 ppm of range switch setting Output current drift: <100 ppm over 8 hours post warm-up Programming speed: 10 ms Transient recovery: ≤ 4 ms Current resolution: 0.02% of range; 2 mA front-panel resolution Voltage resolution: 200 μ V with 4-digit push-button and fine-adjust knob Metering & Display Dual large-format analog meters enable simultaneous voltage and current monitoring. Meter ranges: 1.2 mA, 12 mA, 120 mA and 360 V DC. Meter accuracy: $\pm 2\%$ of full scale. Key Features Range switch selects output current and meter scales Ten-turn current control for continuous adjustment across full output span Single-turn voltage control for continuous voltage limit adjustment Analog remote programming of voltage limit via stable, low-noise external resistors Built-in SCR crowbar overvoltage protection monitors output and clamps to zero if preset voltage limit is exceeded Typical Applications Semiconductor device and material characterization Precision resistivity and conductivity measurements Electrochemical testing requiring stable, controlled current delivery Research and production environments demanding tight current stability over extended measurement intervals

6186C Characteristics / Specifications

PARAMETER	VALUE
Model	6186C
Instrument Type	DC constant current source
Compliance Voltage	up to 300 V DC
Current Range Low	0 to 1 mA
Current Range Mid	0 to 10 mA
Current Range High	0 to 100 mA
Maximum Current	100 mA
Load Regulation	less than 25 ppm plus 5 ppm of range switch setting
Transient Recovery	4 ms or less
Output Programming Speed	10 ms
Metering	two large meters for simultaneous voltage and current monitoring
Meter Count	2
Output Capacitor	eliminated for high output impedance
Topology	linear constant current source
Related Lower Voltage Model	6181C sources up to 250 mA at 100 V
Related Catalog Power Class	30 W class listing in Agilent 603xA-family comparison tables (6186C 300 V, 0.1 A)
Range Count	3
Form Factor	bench current source
Brand Lineage	HP / Agilent / Keysight
Use Case	high voltage constant current sourcing
Regulation Units	ppm of range switch setting
Recovery Architecture	no output capacitor

6186C Specifications

PARAMETER	VALUE
Agilent 6186C DC Current Source 0 to 100 mA 300 V	Overview
Applications	High-voltage current bias of devices and circuits needing up to 300 V compliance.
Key Features	Three current ranges to 100 mA
Technical Specifications	Model: 6186C

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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Notes	
Range, 300 V compliance, load-regulation, recovery, and programming-speed rows from Keysight-Agilent 6186C current-source product specifications.	

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