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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 66309B DC Power Supply

The Keysight/Agilent 66309B is a mobile communications DC source for wireless and battery-powered device test. OEM overview rates main output 0 to 15 V / 0 to 3 A with auxiliary 0 to 12 V / 1.5 A. Handset/WLAN/Bluetooth manufacturing test, battery drain analysis, and charger simulation. Fast output response for pulsed digital loads. Dynamic measurement digitizer for battery current drain. Agilent Keysight 66309B Mobile Communications DC Source 0 to 15 V 0 to 3 A. The Keysight/Agilent 66309B is a mobile communications DC source for wireless and battery-powered device test. OEM overview rates main output 0 to 15 V / 0 to 3 A with auxiliary 0 to 12 V / 1.5 A. Handset/WLAN/Bluetooth manufacturing test, battery drain analysis, and charger simulation. Fast output response for pulsed digital loads.



MODEL

**Agilent / Keysight
66309B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

66309B

LISTING

<https://aumictechlabs.com/products/66309b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 66309B is a dual-output DC power supply engineered for mobile communications and battery-powered device testing. Each of its two independent outputs delivers 0–15 V at 0–3 A continuous, with Output 1 capable of peak current to 5 A for up to 7 ms. Combined power capability reaches 90 W. The 66309B addresses the dynamic demands of wireless device testing - rapid current pulses, voltage transients, and simultaneous battery and charging circuit validation - while occupying only half-rack width at 2 RU height. Programming

accuracy reaches $\pm 0.05\% + 10 \text{ mV}$ for voltage and $\pm 0.05\% + 1.33 \text{ mA}$ for current. Readback accuracy is $\pm 0.03\% + 5 \text{ mV}$ (voltage) and $\pm 0.2\% + 0.5 \text{ mA}$ (current above 20 mA). Ripple and noise remain tightly controlled: 1 mV RMS and 6 mV peak-to-peak voltage; 2 mA RMS current. Transient response settles in less than 35 μs with maximum voltage droop of 70 mV. Remote sensing capability accommodates up to 4 V drop per load lead, with load regulation adjustable accordingly.

Technical Specifications

Outputs: 2 independent channels, each 0–15 V, 0–3 A continuous; Output 1 supports 5 A peak ($\leq 7 \text{ ms}$)

Total Power: 90 W maximum

Voltage Accuracy: $\pm 0.05\% + 10 \text{ mV}$ (programming); $\pm 0.03\% + 5 \text{ mV}$ (readback)

Current Accuracy: $\pm 0.05\% + 1.33 \text{ mA}$ (programming); $\pm 0.2\% + 0.5 \text{ mA}$ (readback, $> 20 \text{ mA}$)

Voltage Ripple & Noise: 1 mV RMS, 6 mV peak-to-peak

Current Ripple: 2 mA RMS

Transient Response: $< 35 \mu\text{s}$ settling; 70 mV maximum droop

Input: 104–127 VAC, 50/60 Hz (standard); 100/120/220/230 VAC options available

Dimensions: 212.8 × 88.1 × 435 mm (half-rack, 2 RU)

Compliance: Installation Category II, Pollution Degree 2

Key Features

- GPIB (IEEE 488.2) interface with SCPI command language
- Remote sensing with 4 V drop tolerance per load lead
- Compact half-rack form factor eliminates separate supply requirements
- Simultaneous dual-output operation for battery and charger testing

Typical Applications

- Mobile phone and wireless device power validation
- Battery charging circuit characterization
- Rapid transient and current pulse simulation

Compatibility & Integration

GPIB connectivity and SCPI compatibility enable integration into automated test systems and ATE platforms for mobile communications development and production.

66309B Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Mobile communications DC source
Series Family	Keysight 66300 Mobile Communications DC Sources
Number of Outputs	2
Main Output Voltage	0 to 15 V
Main Output Current	0 to 3 A
Peak Current Up To 7 ms	5 A
Programming Accuracy Voltage 25 C	0.05 percent plus 10 mV
Programming Accuracy Current	0.05 percent plus 1.33 mA
Ripple Noise Voltage RMS	1 mV
Ripple Noise Voltage Peak Peak	6 mV
Ripple Noise Current RMS	2 mA
DC Measurement Accuracy Voltage	0.03 percent plus 5 mV
Low Current Measurement Range	minus 20 mA to plus 20 mA at 0.1 percent plus 2.5 uA
Dynamic Measurement Buffer	4096 points
Sampling Interval	15 us to 31200 s
Transient Response Time	less than 35 us
Command Processing Time	4 ms average
Output Programming Rise Fall	less than 200 us on 15 V models
Measurement Time	50 ms average
GPIOB	IEEE-488.2 SCPI
DC Floating Voltage	plus or minus 50 Vdc from chassis
Remote Sensing Drop	up to 3 to 4 V total by model
Auxiliary Output Voltage	0 to 12 V
Auxiliary Output Current	0 to 1.5 A
Auxiliary Programming Accuracy Voltage	0.2 percent plus 40 mV

PARAMETER	VALUE
Auxiliary Ripple Noise Voltage	1 mV rms / 6 mV p-p
Input Power	2 A, 170 W at 100 Vac worst case
Programmable Output Resistance	not on 66309B

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.

performance models	
GPIB SCPI with VXI drivers	
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Notes
From Keysight Mobile Communications DC Sources Technical Overview table column 66309B/D.

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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<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
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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.