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Data Sheet

August 13, 2026

HP / AGILENT

HP / Agilent 66309D DC Source 0-15V 0-3A

Agilent 66309D Dual Output Mobile Communications DC Source with DVM The Agilent/HP 66309D is a dual-output 15 V / 3 A (5 A peak for 7 ms) mobile-communications DC source with a built-in auxiliary DVM. Output 1 sources/sinks and digitizes battery current drains (4096-point buffer). An auxiliary 0 to 12 V / 1.5 A output simulates a charger port. Transient recovery is less than 35 us with typical 70 mV dip. The D suffix adds the rear-panel voltmeter versus the 66309B. Handset and WLAN main-battery emulation; charger-port simulation; dynamic talk/standby/sleep current measurement; production ATE needing integrated DVM. The Agilent/HP 66309D is a dual-output 15 V / 3 A (5 A peak for 7 ms) mobile-communications DC source with a built-in auxiliary DVM. Output 1 sources/sinks and digitizes battery current drains (4096-point buffer). An auxiliary 0 to 12 V / 1.5 A output simulates a charger port. Transient recovery is less than 35 us with typical 70 mV dip. The D suffix adds the rear-panel voltmeter versus the 66309B. Handset and WLAN main-battery emulation; charger-port simulation; dynamic talk/standby/sleep current measurement; production ATE needing integrated DVM.

**MODEL****HP / Agilent
66309D****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****66309D****LISTING**<https://aumictechlabs.com/products/66309d-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The HP/Agilent 66309D is a dual-output DC power supply purpose-built for mobile communications and battery device testing. Each of its two independent outputs delivers 0–15 V

at 0–3 A (45 W max per output, with 5 A peak capability for up to 7 ms). A built-in digital voltmeter provides direct measurement of external voltages from –4.5 Vdc to +25 Vdc, eliminating the need for external instrumentation. Technical Specifications Output ratings span 0–15 V and 0–3 A per channel with 45 W maximum power per output. Peak current reaches 5 A for transient testing up to 7 ms. Programming accuracy is 0.05% + 10 mV for voltage and 0.05% + 1.33 mA for current (at 25°C ±5°C). DC readback accuracy for voltage measures 0.03% + 5 mV. Current readback ranges from 0.2% + 0.5 mA (positive range) to 0.1% + 2.5 µA in the ±20 mA range. Voltage noise and ripple stay exceptionally low: 1.0 mV RMS and 6 mV peak-to-peak. Current ripple is 2 mA RMS. Transient response time is less than 35 µs with a 70 mV voltage drop. Output programming settles in under 200 µs rise/fall time, with full settling to 1 LSB within 6 ms (2 ms in fast mode). The integrated DVM achieves 0.04% + 5 mV DC accuracy and 1% + 5 mV AC+DC RMS accuracy (60 Hz to 10 kHz). Common mode measurement range extends to –4.5 Vdc to +25 Vdc. Key Features Simultaneous independent control of main battery and charger circuitry testing Excellent voltage transient response prevents test interruptions from wiring voltage drops Open-sense wire connection detection for cellular telephone applications Adaptive fan speed for quiet operation at reduced power levels Built-in digital voltmeter eliminates external measurement equipment GPIB and remote interfaces for automated test systems Typical Applications Mobile device battery characterization, wireless charging circuit validation, cellular telephone power integrity testing, and simultaneous battery/charger circuit evaluation. Compatibility & Integration GPIB connectivity enables integration into automated test benches. Optional 521 adds solid-state output disconnect relays. Rackmount kits available: Option 1CM (standard) and Option AXS (side-by-side). Weight: 9.7 kg. Operating altitude to 2000 m, humidity to 95%.

Features & description

From manufacturer datasheet

Features

- Dual output: main battery port plus 12 V / 1.5 A charger simulator
- Built-in DVM -25 to +25 Vdc (66309D)
- Dynamic measurement buffer 4096 points; 15 μ s to 31200 s sampling
- Open-sense detection; Option 521 solid-state relays
- GPIB SCPI; 14565B device characterization software

66309D Characteristics / Specifications

PARAMETER	VALUE
Model	66309D
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	Dual output mobile communications DC source with DVM
Family	66300 Mobile Communications DC Sources
Alias	HP 66309D; Agilent 66309D; Keysight 66309D
Number Of Outputs	2
Main Output Voltage	0 to 15 V
Main Output Current	0 to 3 A
Main Peak Current	5 A for up to 7 ms
Programming Accuracy Voltage	0.05 percent plus 10 mV at 25 plus/minus 5 C
Programming Accuracy Plus Current	0.05 percent plus 1.33 mA at 25 plus/minus 5 C
Ripple Voltage RMS	1 mV (20 Hz to 20 MHz)
Ripple Voltage PP	6 mV
Ripple Current RMS	2 mA
DC Measurement Voltage	0.03 percent plus 5 mV
DC Measurement Plus 20 mA To Rated	0.2 percent plus 0.5 mA
DC Measurement Minus 20 mA To Rated	0.2 percent plus 1.1 mA
DC Measurement Plus Minus 20 mA Range	0.1 percent plus 2.5 uA
Dynamic Buffer Size	4096 points
Sampling Interval	15 us to 31200 s
Transient Response Time	less than 35 us to within 20 mV after 0.1 to 1.5 A step
Transient Voltage Dip Typical	70 mV (up to 15 ft 22 AWG)
DVM Input Range	-25 to +25 Vdc
DVM DC Readback Accuracy	0.04 percent plus 5 mV at 25 plus/minus 5 C
DVM AC Plus DC Readback	1 percent plus 5 mV (60 Hz to 10 kHz; sine greater than 25 mV rms)

PARAMETER	VALUE
Auxiliary Output Voltage	0 to 12 V
Auxiliary Output Current	0 to 1.5 A
Auxiliary Programming Voltage	0.2 percent plus 40 mV
Auxiliary Programming Current	0.2 percent plus 4.5 mA
Auxiliary Measurement Voltage	0.2 percent plus 15 mV
Auxiliary Measurement Current	0.2 percent plus 3 mA
Auxiliary Ripple Voltage RMS PP	1 mV / 6 mV
Output Programming Rise Fall	less than 200 us (10/90 percent) on output 1
Command Processing Time	4 ms average (display disabled)
Measurement Time Average	50 ms
DC Floating Voltage	plus/minus 50 Vdc maximum from chassis
Remote Sense Main	up to 4 V per load lead
Input Power Worst Case	2 A, 170 W at 100 Vac full load
Size	212.8 mmWx 88.1 mmHx 435 mmDNet Weight: 9.07 kg (20 lb)
Shipping Weight	11.1 kg (24.5 lb)
Related Without DVM	66309B
Related With Battery Emulation	66319D

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	
Technical Specifications	
PARAMETER	VALUE
Model	66309D
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	Dual output mobile communications DC source with DVM
Family	66300 Mobile Communications DC Sources
Alias	HP 66309D; Agilent 66309D; Keysight 66309D
Number Of Outputs	2
Main Output Voltage	0 to 15 V
Main Output Current	0 to 3 A
Main Peak Current	5 A for up to 7 ms
Programming Accuracy Voltage	0.05 percent plus 10 mV at 25 plus/minus 5 C
Programming Accuracy Plus Current	0.05 percent plus 1.33 mA at 25 plus/minus 5 C
Ripple Voltage RMS	1 mV (20 Hz to 20 MHz)
Ripple Voltage PP	6 mV
Ripple Current RMS	2 mA
DC Measurement Voltage	0.03 percent plus 5 mV
DC Measurement Plus 20 mA To Rated	0.2 percent plus 0.5 mA
DC Measurement Minus 20 mA To Rated	0.2 percent plus 1.1 mA
DC Measurement Plus Minus 20 mA Range	0.1 percent plus 2.5 uA
Dynamic Buffer Size	4096 points
Sampling Interval	15 us to 31200 s
Transient Response Time	less than 35 us to within 20 mV after 0.1 to 1.5 A step
Transient Voltage Dip Typical	70 mV (up to 15 ft 22 AWG)
DVM Input Range	-25 to +25 Vdc
DVM DC Readback Accuracy	0.04 percent plus 5 mV at 25 plus/minus 5 C
DVM AC Plus DC Readback	1 percent plus 5 mV (60 Hz to 10 kHz; sine greater than 25 mV rms)
Auxiliary Output Voltage	0 to 12 V

PARAMETER	VALUE
Auxiliary Output Current	0 to 1.5 A
Auxiliary Programming Voltage	0.2 percent plus 40 mV
Auxiliary Programming Current	0.2 percent plus 4.5 mA
Auxiliary Measurement Voltage	0.2 percent plus 15 mV
Auxiliary Measurement Current	0.2 percent plus 3 mA
Auxiliary Ripple Voltage RMS PP	1 mV / 6 mV
Output Programming Rise Fall	less than 200 us (10/90 percent) on output 1
Command Processing Time	4 ms average (display disabled)
Measurement Time Average	50 ms
DC Floating Voltage	plus/minus 50 Vdc maximum from chassis
Remote Sense Main	up to 4 V per load lead
Input Power Worst Case	2 A, 170 W at 100 Vac full load
Size	212.8 mm W x 88.1 mm H x 435 mm D
Net Weight	9.07 kg (20 lb)
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Related Without DVM	66309B
Related With Battery Emulation	66319D

Specifications

PARAMETER	VALUE
Model	66309D
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	Dual output mobile communications DC source with DVM
Family	66300 Mobile Communications DC Sources
Alias	HP 66309D; Agilent 66309D; Keysight 66309D
Number Of Outputs	2
Main Output Voltage	0 to 15 V
Main Output Current	0 to 3 A
Main Peak Current	5 A for up to 7 ms
Programming Accuracy Voltage	0.05 percent plus 10 mV at 25 plus/minus 5 C
Programming Accuracy Plus Current	0.05 percent plus 1.33 mA at 25 plus/minus 5 C
Ripple Voltage RMS	1 mV (20 Hz to 20 MHz)
Ripple Voltage PP	6 mV

PARAMETER	VALUE
Ripple Current RMS	2 mA
DC Measurement Voltage	0.03 percent plus 5 mV
DC Measurement Plus 20 mA To Rated	0.2 percent plus 0.5 mA
DC Measurement Minus 20 mA To Rated	0.2 percent plus 1.1 mA
DC Measurement Plus Minus 20 mA Range	0.1 percent plus 2.5 uA
Dynamic Buffer Size	4096 points
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Related Without DVM	66309B
Related With Battery Emulation	66319D

Notes

Specs from Agilent/Keysight Mobile Communications DC Sources overview for the 66309B/D column. Confirm Option 521 versus AYK relays and line option 100/120/220/230.

Ordering Information

OPTION	DESCRIPTION
Option 521	solid-state relays

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>

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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.