

KEYSIGHT TECHNOLOGIES (AGILENT HP)

N3302A

The Keysight (Agilent/HP) N3302A is a 150 W DC electronic load module designed for use in the N3300A and N3301A series mainframes. It provides constant current (CC), constant voltage (CV), and constant resistance (CR) modes for comprehensive testing of power supplies, batteries, and other DC power sources. As a modular load, it operates in a multi-channel environment, making it suitable for automated test equipment (ATE) and manufacturing systems.

SPECIFICATIONS

General

Interfaces	Via N3300A / N3301A mainframe (GPIB, RS-232)
Display	Via N3300A / N3301A mainframe front panel

Physical

Power Supply	Powered via N3300A / N3301A mainframe
Operating Temperature	0 °C to 55 °C °C
Weight	2.72 kg kg

Input Ratings

Maximum Power	150 W
Maximum Voltage	60 V
Maximum Current	30 A

General Performance

Operating Modes	Constant Current (CC), Constant Voltage (CV), Constant Resistance (CR)
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Constant Current (CC) Mode

Current Range (Low)	0 to 3 A
Current Range (High)	0 to 30 A

Constant Voltage (CV) Mode

Voltage Range (Low)	0 to 6 V
Voltage Range (High)	0 to 60 V

Physical Characteristics

Module Width	1 Slot
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Interfaces and Control

Mainframe Compatibility	Keysight N3300A (6-slot), Keysight N3301A (2-slot)
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Measurement and Readback

Measurement Resolution	16-bit voltage and current readback
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Performance

Minimum Operating Voltage (at full current)	1.2 V
Command Processing Time	< 2 ms
Transient Generator Duty Cycle	3% to 97%

Accuracy

Constant Current Programming Accuracy (High Range)	0.1% + 30 mA
Constant Current Programming Accuracy (Low Range)	0.1% + 3 mA
Constant Current Readback Accuracy (High Range)	0.1% + 35 mA
Constant Current Readback Accuracy (Low Range)	0.1% + 4 mA

Safety & Protection

Isolation Voltage	±240 Vdc (input to chassis)
Protection Features	Overvoltage (OV), Overcurrent (OC), Overpower (OP), Overtemperature (OT), Reverse Polarity

Transient Operation

Transient Generator Frequency Range	0.25 Hz to 10 kHz
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Features

Remote Sensing	Yes
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Accuracy & Performance

Constant Voltage Programming Accuracy	±(0.1% + 50 mV)
Constant Voltage Readback Accuracy	±(0.1% + 50 mV)
Current Ripple & Noise (rms)	3 mA
Voltage Ripple & Noise (rms)	4 mV

TECHNOLOGY

DC Electronic Load

APPLICATIONS

Power Supply Testing, Battery Discharge Testing, DC Source Testing, ATE Systems

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.