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Data Sheet

August 12, 2026

KEYSIGHT / AGILENT

Keysight (Agilent) N6731B DC Power Supply, 5 V, 10 A, 50 W, Programmable

Keysight / Agilent N6731B DC Power Module The N6731B is a one-slot basic DC power module for Keysight N6700 modular power systems and N6705 DC power analyzers. Output 0–5 V / 0–10 A / 50 W with programmable voltage/current, measurement, and protection. The N6731B is a one-slot basic DC power module for Keysight N6700 modular power systems and N6705 DC power analyzers. Output 0–5 V / 0–10 A / 50 W with programmable voltage/current, measurement, and protection.



MODEL

**Keysight / Agilent
N6731B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N6731B

LISTING

<https://aumictechlabs.com/products/n6731b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight N6731B is a 50 W programmable DC power module engineered for the N6700 Low-Profile Modular Power System and N6705 DC Power Analyzer. This single-output, 1U high form factor module delivers 5 V at up to 10 A with integrated measurement and protection capabilities. Designed for automated test equipment systems, it powers devices under test and ATE resources such as fixture control in R&D, design validation, and manufacturing test environments. The compact slot design permits up to four modules in a single rack space, enabling flexible system scaling across multiple voltage and current levels. Technical Specifications Output: 5 V, 0–10 A, 50 W maximum Voltage programming accuracy: 0.1% + 19 mV (at 23°C ±5°C) Voltage measurement

accuracy: 0.1% + 20 mV (at 23°C ±5°C) Current measurement accuracy: 0.15% + 20 mA (at 23°C ±5°C) Output ripple & noise: 2 mV RMS, 10 mV peak-to-peak (CV mode, 20 Hz–20 MHz) Constant current ripple: 8 mA RMS Programming response time: 20 ms (typical, full resistive load) Input supply: 86–240 V AC Operating temperature: 0–55°C Weight: 1.23 kg

Key Features Programmable voltage and current via remote command Over-voltage, over-current, and over-temperature protection Low-profile 1U height supports high-density configurations LXI Class C compliant mainframe communication

Typical Applications Device under test power delivery in ATE systems Power supply for fixture control and test resources Design validation and manufacturing test environments Research and development power distribution

Compatibility & Integration The module integrates into N6700 Series mainframes and the N6705 DC Power Analyzer. Communication interfaces include GPIB, LAN (LXI-C), and USB, enabling seamless integration into automated test benches and networked measurement systems.

Features & description

From manufacturer datasheet

Features

• Output voltage: 0 to 5 V • Output current: 0 to 10 A • Output power: 50 W maximum • Module size: 1 slot • Ripple & noise: 10 mV p-p / 2 mV rms • Voltage programming accuracy: 0.1% + 19 mV • Current programming accuracy: 0.15% + 20 mA • Voltage measurement accuracy: 0.1% + 20 mV • Current measurement accuracy: 0.15% + 20 mA • Constant voltage rms noise: 2 mV • Constant voltage peak-to-peak: 10 mV • Constant current rms (literature): 8 mA class • Up/down programming time with full resistive load: 20 ms typical • Protection: over-voltage, over-current, over-temperature • Host mainframes: N6700 low-profile MPS; N6705 DC Power Analyzer • Mainframe interfaces (host): GPIB, USB 2.0, 10/100 LAN, LXI Class C • Options: 054 high-speed test extensions; 760 disconnect + polarity reverse; 761 output disconnect relays • Ambient: module used in mainframes rated 0–55 °C (current derate 1%/°C above 40 °C on mainframe)

Applications

• DUT power in ATE fixtures • Bench power within N6705 analyzer mainframes • Multi-output systems with other N67xx modules

N6731B Characteristics / Specifications

PARAMETER	VALUE
Model	N6731B
Manufacturer	Keysight / Agilent
Instrument Type	Modular DC Power Module
Alias	N6731B; Keysight N6731B; Agilent N6731B
Voltage	0–5 V
Current	0–10 A
Power	50 W
Ripple rms	2 mV Vprogram accuracy: 0.1% + 19 mV Iprogram accuracy: 0.15% + 20 mA Vmeasure accuracy: 0.1% + 20 mV Imeasure accuracy: 0.15% + 20 mA
Slots	1
Host	N6700 / N6705 series Notes Specs from Keysight N6700 family data sheet (N6731B row). Module only—mainframe sold separately. Confirm installed options 054/760/761 on the unit.
Output voltage	0 to 5 V
Output current	0 to 10 A
Output power	50 W maximum
Module size	1 slot
Ripple & noise	10 mV p-p / 2 mV rms
Voltage programming accuracy	0.1% + 19 mV
Current programming accuracy	0.15% + 20 mA
Voltage measurement accuracy	0.1% + 20 mV
Current measurement accuracy	0.15% + 20 mA
Constant voltage rms noise	2 mV
Constant voltage peak-to-peak	10 mV
Constant current rms (literature)	8 mA class

PARAMETER	VALUE
Up/down programming time with full resistive load	20 ms typical
Protection	over-voltage, over-current, over-temperature
Host mainframes	N6700 low-profile MPS; N6705 DC Power Analyzer
Mainframe interfaces (host)	GPIB, USB 2.0, 10/100 LAN, LXI Class C
Options	054 high-speed test extensions; 760 disconnect + polarity reverse; 761 output disconnect relays
Ambient	module used in mainframes rated 0–55 °C (current derate 1%/°C above 40 °C on mainframe)

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	
Specifications	
PARAMETER	VALUE
Ripple rms	2 mV
V program accuracy	0.1% + 19 mV
I program accuracy	0.15% + 20 mA
V measure accuracy	0.1% + 20 mV
I measure accuracy	0.15% + 20 mA
Slots	1
Host	N6700 / N6705 series
Specifications	
PARAMETER	VALUE
Model	N6731B
Manufacturer	Keysight / Agilent
Instrument Type	Modular DC Power Module
Alias	N6731B; Keysight N6731B; Agilent N6731B
Specifications	
PARAMETER	VALUE
Voltage	0-5 V
Current	0-10 A
Power	50 W
Ripple p-p: 10 mV	
Specifications	
PARAMETER	VALUE
Ripple rms	2 mVVprogram accuracy: 0.1% + 19 mVIprogram accuracy: 0.15% + 20 mAVmeasure accuracy: 0.1% + 20 mVImeasure accuracy: 0.15% + 20 mA
Slots	1
Host	N6700 / N6705 series

Notes

Specs from Keysight N6700 family data sheet (N6731B row). Module only-mainframe sold separately. Confirm installed options 054/760/761 on the unit.

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 ·
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.