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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Keysight N6742B DC Power Module, 8V, 12.5A, 100W

The Agilent/Keysight N6742B is a 100 W basic programmable DC power module for N6700 Low-Profile Modular Power System or N6705 DC Power Analyzer mainframes. OEM N6700 module tables list 0 to 8 V and 0 to 12.5 A output with built-in measurement and protection. ATE fixture control, multi-output modular power, and DUT bias inside N6700/N6705 mainframes. Programming Accuracy Voltage At 23 C Plus Minus 5 C: 0.1 percent + 19 mV Programming Accuracy Current At 23 C Plus Minus 5 C: 0.15 percent + 20 mA LXI Compliance Via Mainframe: LXI ClassCOption 760: Output Disconnect and Polarity Reversal Relays Derating Note: current derated 1 percent perCabove 40 C per OEM module notes Series Family: N6700 modular power modules From Keysight/Agilent N6700 modular DC power module documentation for N6742B.



MODEL

**Agilent / Keysight
N6742B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N6742B

LISTING

<https://aumictechlabs.com/products/n6742b-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight N6742B is a precision DC power module, part of the N6700 modular power system family. This module delivers accurate and stable DC power, essential for demanding applications like ATE systems and product validation. Programmable voltage and current settings

allow for flexible power delivery, while built-in protection features ensure the safety of both the power module and the device under test. Its compact design and modularity allow for easy integration and scalability within a test setup.

Features & description

From manufacturer datasheet

Built-in voltage and current measurement

OVP OCP OTP protection path Optional disconnect and polarity relays Mainframe GPIB LAN USB LXI interfaces Technical Specifications Model: N6742B DC Output Voltage: 0 to 8 V DC Output Current: 0 to 12.5 A DC Output Power: 100 W Current At 50 W Mode Class: 6.25 A class Programming Accuracy Voltage At 23 C Plus Minus 5 C: 0.1 percent + 19 mV Programming Accuracy Current At 23 C Plus Minus 5 C: 0.15 percent + 20 mA CV Ripple Noise Peak To Peak 20 Hz To 20 MHz: 12 mV CV Ripple Noise RMS: 2 mV CC Ripple Noise RMS: 4 mA Load Regulation Voltage: 6 mV Load Regulation Current: 2 mA Slots Required: 1 Compatible Mainframes Class: N6700B N6701A N6702A N6705 series Module Type: basic DC power module Remote Interfaces Via Mainframe: GPIB USB 2.0 10/100 Base-T Ethernet LAN LXI Compliance Via Mainframe: LXI ClassCOption 760: Output Disconnect and Polarity Reversal Relays Option 761: Output Disconnect Relays Option 054: High Speed Test Extensions Derating Note: current derated 1 percent perCabove 40 C per OEM module notes Brand Lineage: Agilent / Keysight Series Family: N6700 modular power modules Notes From Keysight/Agilent N6700 modular DC power module documentation for N6742B.

N6742B Characteristics / Specifications

PARAMETER	VALUE
Model	N6742B
DC Output Voltage	0 to 8 V
DC Output Current	0 to 12.5 A
DC Output Power	100 W
Current At 50 W Mode Class	6.25 A class
Programming Accuracy Voltage At 23 C Plus Minus 5 C	0.1 percent + 19 mV
Programming Accuracy Current At 23 C Plus Minus 5 C	0.15 percent + 20 mA
CV Ripple Noise Peak To Peak 20 Hz To 20 MHz	12 mV
CV Ripple Noise RMS	2 mV
CC Ripple Noise RMS	4 mA
Load Regulation Voltage	6 mV
Load Regulation Current	2 mA
Slots Required	1
Compatible Mainframes Class	N6700B N6701A N6702A N6705 series
Module Type	basic DC power module
Remote Interfaces Via Mainframe	GPIOB USB 2.0 10/100 Base-T Ethernet LAN
LXI Compliance Via Mainframe	LXI ClassCOption 760: Output Disconnect and Polarity Reversal Relays
Derating Note	current derated 1 percent perCabove 40 C per OEM module notes
Brand Lineage	Agilent / Keysight
Series Family	N6700 modular power modules

N6742B Specifications

PARAMETER	VALUE
Agilent Keysight N6742B DC Power Module	Overview
Applications	ATE fixture control, multi-output modular power, and DUT bias inside N6700/N6705 mainframes.
Key Features	Single-slot N6700 family module
Technical Specifications	Model: N6742B
Notes	From Keysight/Agilent N6700 modular DC power module documentation for N6742B.

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
Model	N6742B
DC Output Voltage	0 to 8 V
DC Output Current	0 to 12.5 A
DC Output Power	100 W
Current At 50 W Mode Class	6.25 A class
Programming Accuracy Voltage At 23 C Plus Minus 5 C: 0.1 percent + 19 mV Programming Accuracy Current At 23 C Plus Minus 5 C: 0.15 percent + 20 mA CV Ripple Noise Peak To Peak 20 Hz To 20 MHz: 12 mV	
Specifications	
PARAMETER	VALUE
CV Ripple Noise RMS	2 mV
CC Ripple Noise RMS	4 mA
Load Regulation Voltage	6 mV
Load Regulation Current	2 mA
Slots Required	1
Compatible Mainframes Class	N6700B N6701A N6702A N6705 series
Module Type	basic DC power module
Remote Interfaces Via Mainframe	GPiB USB 2.0 10/100 Base-T Ethernet LAN
LXI Compliance Via Mainframe	LXI ClassCOption 760: Output Disconnect and Polarity Reversal Relays
Option 761: Output Disconnect Relays Option 054: High Speed Test Extensions	
Specifications	
PARAMETER	VALUE
Derating Note	current derated 1 percent perCabove 40 C per OEM module notes
Brand Lineage	Agilent / Keysight
Series Family	N6700 modular power modules

Notes

From Keysight/Agilent N6700 modular DC power module documentation for N6742B.

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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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.