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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight N6701A Low-Profile Modular Power System Mainframe, 600W, 4 Slots

Modules Supported: N6700 series DC power modules 1 to 4 Remote Interfaces: GPIB USB 2.0
 10/100 Base-T LAN LXI Compliance: LXI ClassCCommand Set: SCPI 1993 IEEE 488.2 Output
 Sequencing Multi Mainframe: supported on N6700B N6701A N6702A Remote Interfaces: GPIB
 USB 2.0 10/100 Base-T LAN LXI Compliance: LXI ClassCCommand Set: SCPI 1993 IEEE 488.2
 Output Sequencing Multi Mainframe: supported on N6700B N6701A N6702A Side Ventilation:
 side air vents no top or bottom vents



MODEL

**Agilent / Keysight
N6701A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N6701A

LISTING

<https://aumictechlabs.com/products/n6701a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight N6701A is a 1U-high, 4-slot modular power system mainframe delivering 600 W total output capacity for automated test and benchtop applications. This low-profile mainframe accepts up to four N6700 series DC power modules - ordered separately - and supports N678x SMUs and N679x electronic loads. LXI Class-C compliant with GPIB, LAN, and USB interfaces, it enables flexible remote control via integrated web server and SCPI command set. System integrators can choose from over 30 compatible modules (20 W to 300 W each) to build optimized solutions for performance, precision, and cost.

Technical Specifications Slots: 4 Maximum Output Power: 600 W (at 100–240 VAC input) Form Factor: 1U height, low-profile AC Input: 100–240 VAC, 50/60/400

Hz (operating range: 86–264 VAC) Power Consumption: 1500 VA typical Interfaces: GPIB, LAN, USB; LXI Class-C compliant Fuse: Internal (not customer accessible)Key Features Modular design accepts N6700, N678x, and N679x series modules Programmable output sequencing with delays across single or multiple mainframes Voltage slew rate control: adjustable from maximum speed to 10 seconds List mode supports user-defined arbitrary waveforms up to 512 points (module dependent) Flexible triggering and digital I/O capabilities Integrated web server for browser-based control SCPI programming support with Visual Basic and Excel Macro examples Synchronization signals enable coordinated multi-mainframe operationTypical Applications Automated test equipment (ATE) with synchronized power sequencing Battery life analysis and functional testing using N6780 SMU modules Multi-rail device characterization with precision power modules Production and design validation requiring programmable waveform generationCompatibility & Integration The N6701A mainframe is backward and forward compatible with N677x, N678x, and N679x module families. Over 30 DC power module options span 20 W to 300 W ratings, from basic supplies to high-precision instruments. Multiple mainframes synchronize via I/O port connections for coordinated multi-supply test sequences.

N6701A Characteristics / Specifications

PARAMETER	VALUE
Model	N6701A
Mainframe Type	low-profile modular power system
Total Available Output Power	600 W
Module Slots	4
Modules Supported	N6700 series DC power modules 1 to 4
Height	44.45 mm (1.75 in)
Width	432.5 mm (17.03 in)
Depth	585.6 mm
Weight With 4 Modules	11.82 kg (26 lb)
AC Input	100 to 240 Vac 50/60/400 Hz
Input VA Rating	1440 VA
Remote Interfaces	GPIB USB 2.0 10/100 Base-T LAN
LXI Compliance	LXI ClassCCommand Set: SCPI 1993 IEEE 488.2
Output Sequencing Multi Mainframe	supported on N6700B N6701A N6702A
Side Ventilation	side air vents no top or bottom vents
Firmware Storage	FLASH ROM updatable over GPIB LAN or USB
Power Management	allocate mainframe power among modules when sum exceeds rating
Digital IO	trigger fault inhibit class per family
Form Factor	1U 19 inch rack with required N6709A kit
Series Family	Keysight N6700 MPS
Mainframe Power Class Sibling N6700B	400 W
Mainframe Power Class Sibling N6702A	1200 W
Filler Panel Kit	N6708A when fewer than 4 modules
Rack Mount Kit Required	N6709A

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 plus value module configurations in 1U rack space.

Key Features

- 1U four-slot modular mainframe
- 600 W total available module output power
- GPIB USB and 10/100 LAN standard
- LXI ClassCcompliance
- Multi-mainframe output sequencing sync

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Rack Mount Kit Required	N6709A

Notes
From Keysight N6700 Modular Power System Family data sheet mainframe column for N6701A. Module output ratings depend on installed N67xx modules; confirm module mix and firmware revision.

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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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.