Product Fact Sheet

Keysight N6700C Low-Profile Modular Power System (MPS) and N67XX DC Power Modules

Small, flexible and fast power supplies for ATE applications



1. N6700C Low-profile MPS, 300 W
2. N6701C Low-profile MPS, 600 W
3. N6702C Low-profile MPS, 1200 W
4. Bright LCD display, view status indicators and settings for all 4 outputs
5. System keys for easy access to front panel menus and settings
6. Navigation keys
7. Output keys
8. Numeric entry keys

Key features

- 50 W, 100 W, 300 W and 500 W DC power modules
- 3 mainframes: 400 W, 600 W, 1200 W
- True 1-rack unit height (1U)
- Mix-and-match over 30 DC power modules of 4 different performance levels: Basic, hi-performance, precision, and source/measure units (SMU)
- Stable, reliable DC outputs up to 150 V and up to 50 A
- USB, LAN (LXI Core) and GPIB standard
- Simultaneous voltage and current measurements with N6760 series, and N6780 series SMUs
- List mode software sequencer (arb mode)
- Built-in digitizer (scope mode) [1]
- Over- voltage, current and temperature protection
- Multiple-output front panel display and controls
- Virtual channels for easy parallel up to 100 A

1. All modules except N6760 series and N6780 series SMUs require Option 054.

	Mainframe	Basic modules	High performance	Precision modules	Source Measure Units (SMUs)
	N6700C, N6701C, N6702C	**N673X, N674X, N677X**	**N675X**	**N676X**	**N678X**
Power	300 W, 600 W, 1200 W	50 W, 100 W, 300 W	50 W, 100 W, 300 W, 500 W	50 W, 100 W, 300 W, 500 W	20 W, 80 W
Voltage	Up to 240 V (with multiple modules in series)	Up to 150 V	Up to 60 V	Up to 60 V	Up to 20 V
Current	Up to 100 A (with two 50A modules in parallel)	Up to 20A	Up to 50A	Up to 50 A	Up to 8 A
Voltmeter accuracy [1]	N/A	0.1% + 20 mV	0.05% + 10 mV	0.016% + 1.5 mV	0.025% + 50 µV
Ammeter accuracy [1]	N/A	0.15% + 2 mA	0.1% + 4 mA	0.05% + 100 nA	0.025% + 8 nA
Arbitrary waveform [2] generator function	Create waveforms up to 512 points				
Scope function [2]	Digitizes at up to 200 kHz, up to 512 k points, up to 18-bits (module dependent)				
Interface	GPIB, USB, LAN (LXI Core)				

1. Module and range dependent; best accuracy shown.
2. Code must be written by the user. Examples available online.

Options and accessories

Option	Option description
N6709C	Special rack mount kit
N6708A	Filler module kit

Example applications	Using built-in features
PC motherboard power on/off	Output sequencing for proper turn on/off
Sleep-mode current for RF power amps	µA current measurement capabilities
Military/police radio	High-power (up to 500 W) with low-level (mA) measurement accuracy
Base station power amps	High-power (up to 500 W) with low-level (mA) measurement accuracy
Automotive “crank” test	Built-in arbitrary waveform generator
Battery simulator/charger, current drain analysis, battery run down test	Fast output response, programmable output resistance, seamless measurement (measure uA to A in a single sweep)
Advanced functional test	Seamless measurement (measure uA to A in a single sweep)
General purpose discrete component test	4-quadrant operation, bipolar power source, bipolar electronic load

For R&D applications, consider the N6705C DC Power Analyzer



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