Keysight N6700 Low-Profile Modular Power System (MPS), N67XX DC Power Modules and Electronic Load

Small, flexible and fast power supplies for ATE applications

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, source/measure units (SMU) and electronic load
- 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, N6780 series SMUs and N6790 electronic load
- 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.

Learn more at: www.keysight.com
## N6700C Series Source Measure Units (SMUs)

<table>
<thead>
<tr>
<th>Module</th>
<th>Range</th>
<th>Electronic Load</th>
<th>Source Measure Units (SMUs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N6701C</td>
<td>300 W, 600 W, 1200 W</td>
<td>20 W, 80 W</td>
<td>N678X (100W, 100V)</td>
</tr>
<tr>
<td>N6702C</td>
<td>50 W, 100 W, 300 W</td>
<td>80 W, 200 W</td>
<td>N679X (200W, 200V)</td>
</tr>
<tr>
<td>N6703X, N674X, N677X</td>
<td>50 W, 100 W, 300 W, 500 W</td>
<td>20 W, 80 W</td>
<td>N678X (100W, 100V)</td>
</tr>
<tr>
<td>N675X</td>
<td>50 W, 100 W, 300 W, 500 W</td>
<td>80 W, 200 W</td>
<td>N679X (200W, 200V)</td>
</tr>
</tbody>
</table>

### Power
- Up to 350 V (with multiple modules in series)
- Up to 150 V
- Up to 60 V
- Up to 20 V
- Up to 60V

### Voltage
- Up to 100 A (with two 50A modules in parallel)
- Up to 20A
- Up to 50A
- Up to 50 A
- Up to 8 A

### Current
- N/A
- 0.1% + 20 mV
- 0.05% + 10 mV
- 0.016% + 1.5 mV
- 0.025% + 50 µV
- 0.025% + 8 nA
- 0.03% + 7.2mV

### Voltmeter Accuracy
- N/A
- 0.15% + 2 mA
- 0.1% + 4 mA
- 0.05% + 100 nA
- 0.025% + 8 nA
- 0.04% + 400uA

### Ammeter Accuracy
- N/A
- 0.1% + 20 mV
- 0.05% + 10 mV
- 0.016% + 1.5 mV
- 0.025% + 50 µV
- 0.03% + 7.2mV

### Arbitrary Waveform Generator Function
- Create waveforms up to 512 points

### Scope Function
- Digitizes at up to 200 kHz, up to 512 k points, up to 18-bits (module dependent)

### Interface
- GPIB, USB, LAN (LXI Core)

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

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

<table>
<thead>
<tr>
<th>Option</th>
<th>Option Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N6709A</td>
<td>Special rack mount kit</td>
</tr>
<tr>
<td>N6708A</td>
<td>Filler module kit</td>
</tr>
</tbody>
</table>

### Example Applications
- **Using Built-In Features**
  - Output sequencing for proper turn on/off
  - μA current measurement capabilities
  - High-power (up to 500 W) with low-level (mA) measurement accuracy
  - High-power (up to 500 W) with low-level (mA) measurement accuracy
  - Built-in arbitrary waveform generator
  - Fast output response, programmable output resistance, seamless measurement (measure uA to A in a single sweep)
  - Seamless measurement (measure uA to A in a single sweep)
  - 4-quadrant operation, bipolar power source, bipolar electronic load

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**Learn more at:** www.keysight.com

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