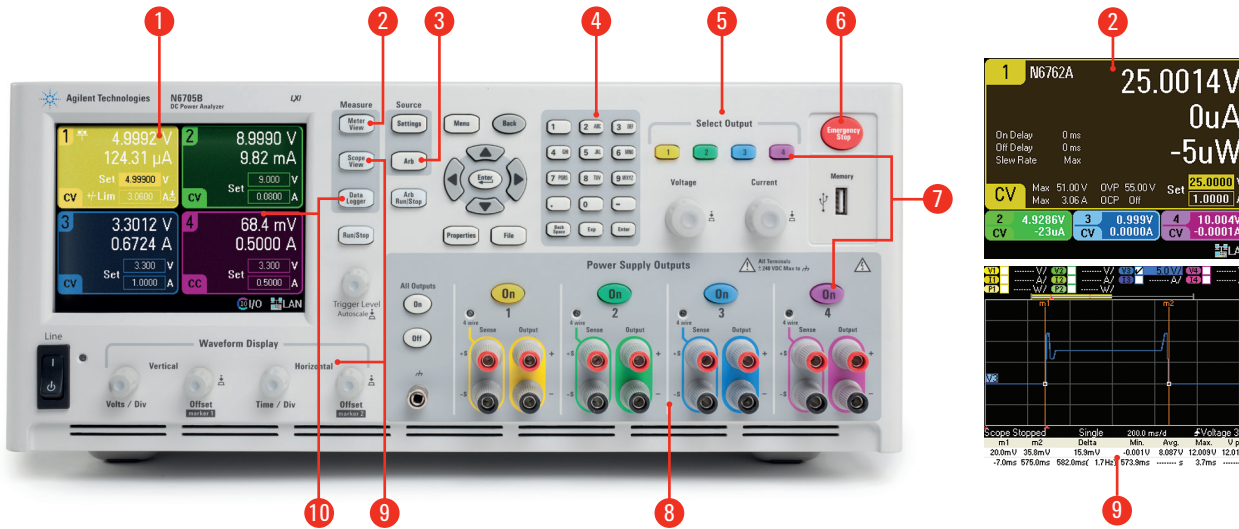


Quick Fact Sheet

Agilent N6705B DC Power Analyzer mainframe and modules: N6781A, N6782A, N6784A, N6783A-MFG/BAT

Get insight into your device's power consumption – in minutes, not hours – without writing a single line of code

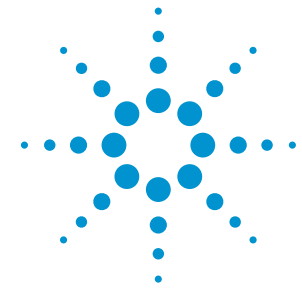


1. Color display for fast, simple setup and monitoring
2. Digital voltage and current read back with meter view
3. Arbitrary power waveform generator
4. Easy front-panel controls eliminate the need to develop programs
5. Rear panel computer interfaces: GPIB, USB, LAN (LXI class C compliant)
6. Emergency stop button-stops output of power but measurements continue
7. Connections and controls color-coded to display
8. Up to 4 advanced DC power outputs
9. Oscilloscope-like view of voltage and current with markers and calculated measurements
10. Data logging of voltage, current, and power

Save time with this single-box solution

- Unrivaled productivity gains for sourcing and measuring DC voltage and current
- One-box solution that eliminates the need to gather multiple instruments: Up to 4 advanced DC power supplies, DMM, scope, arb and data logger

* The N6705B is a full replacement of the discontinued N6705A.



14585A control and analysis software

The software for the DC power analyzer complements the front panel of the N6705A/B mainframe, offering advanced functionality and PC control. It is a flexible R&D tool for any application. It can control any of the N6700 family's over 30 DC power modules when installed in a N6705A/B mainframe. When used to control an N6781A SMU, it can be used for advanced battery drain analysis applications.

Key features

- Complements the N6705A/B DC power analyzer's front panel controls.
- Control and analyze data from up to four N6705A/B DC power analyzer mainframes and any installed modules at once – that's up to 16 power supplies simultaneously.
- Easily create complex waveforms to stimulate or load down a DUT by inputting a formula, choosing from built-in, or importing waveform data.
- Enhanced control and analysis of data with familiar PC controls and large display.
- Data log measurements directly to a PC.
- Perform statistical analysis of power consumption.



Agilent Technologies

Quick Fact Sheet

Agilent N6705B DC Power Analyzer mainframe and modules: N6781A, N6782A, N6784A, N6783A-MFG/BAT

N678X Series of power modules: Source/measure units and application-specific modules

| | Source/Measure Units (SMU) modules | | | Application-specific modules |
|----------------------------------|---|---------------------|---------------------|--|
| | N6781A | N6782A | N6784A | N6783A-BAT |
| Power | 20 W, 2-quadrant | 20 W, 2-quadrant | 20 W, 4-quadrant | 24 W, 2-quadrant |
| Voltage | 20 V, 6 V | 20 V, 6 V | ± 20 V, ± 6 V | 8 V |
| Current | ± 1A, ± 3A | ± 1A, ± 3A | ± 1A, ± 3A | - 2 A to + 3 A |
| Seamless measurement autoranging | Yes | Yes | No | No |
| Voltmeter accuracy | 0.025% + 50 μ V | 0.025% + 50 μ V | 0.025% + 50 μ V | 0.05% + 5 mV |
| Ammeter accuracy | 0.025% + 8 nA | 0.025% + 8 nA | 0.025% + 8 nA | 0.1% + 75 μ A |
| Arb waveforms (V and I) | Sine, step, pulse, ramp, staircase, exponential, user defined | | | No negative current waveforms |
| Scope function | Digitizes up to 200 kHz, up to 512 K points | | | Digitizes up to 50 kHz, up to 512 K points |
| Data logger | Measurement interval 20 usec to 60 sec, 500 million readings | | | |
| Memory (resides in mainframe) | 4 GB internal, up to 2 GB from external USB memory device | | | |
| Battery emulator/charger | Yes | Yes | Yes | No |
| Programmable output resistance | Yes, 0 to 1 Ω | No | No | No |
| External DVM input | Yes | No | No | No |
| Logging ammeter mode | Yes | Yes | Yes | No |
| CCDF/histogram (requires 14585A) | Yes | No | No | No |
| Output disconnect relay | Yes | Yes | Yes | Option 761 |
| Interface | LAN, USB, GPIB (LXI Class C) | | | |

Ordering information

| Model | Description |
|--|---|
| N6705B | N6705B DC power analyzer, modular, 600 W max, 4 slots |
| N6781A | 2-quadrant source/measure unit for battery drain analysis |
| N6782A | 2-quadrant source/measure unit for functional test |
| N6784A | 4-quadrant general-purpose source/measure unit |
| N6783A-BAT | Battery charge/discharge module |
| N6783A-MFG | Mobile communications DC power module |
| 14585A control and analysis SW (see below) | Downloadable for free to communicate to N6705A/B and N67xx modules; a license key must be installed in the N6705A/B |
| N6705B-056 | 14585A license ordered as option to new N6705B |
| N6705U-056 | 14585A license for already owned N6705A [discontinued] or N6705B |

| Select | Example applications... | Description |
|------------|--|---|
| N6781A | Battery simulator/charger, current drain analysis, battery run down test | Fast output response, programmable output resistance, seamless measurement (measure μ A to A in a single sweep) |
| N6782A | Advanced functional test | Seamless measurement (measure μ A to A in a single sweep) |
| N6784A | General purpose discrete component test | 4-quadrant operation, bipolar power source, bipolar electronic load |
| N6783A-BAT | Validate battery performance, battery conditioning, charge/discharge cycling | 2-quadrant operation, programmable source/e-load, built-in digitizer |



For functional test applications consider the Agilent N6700 low-profile mainframes with similar capabilities in a small 1U footprint.

Recommended service options

Additional two years of Return-to-Agilent warranty
 Additional two years of Return-to-Agilent calibrations
 For more information go to www.agilent.com/find/removealldoubt

To find a distributor go to: www.agilent.com/find/distributors

