

## KEYSIGHT TECHNOLOGIES (AGILENT HP)

# N6700 Series - Mainframes and Systems

The Keysight (formerly Agilent) N6700 Series is a family of low-profile modular DC power system mainframes designed to simplify test-system assembly in automated test equipment (ATE) and production environments. Offering 4 module slots in a compact 1U rack-mountable chassis, the series provides total power capacities of 400 W, 600 W, or 1200 W depending on the model. Fully customizable, it supports up to 22 different DC power modules and features fast command processing, standard GPIB, LAN, and USB interfaces, and advanced programmable capabilities including optional digitization and hardware triggering.

## SPECIFICATIONS

### General

|            |                |
|------------|----------------|
| Interfaces | GPIB, LAN, USB |
|------------|----------------|

### Physical

|                       |                                                                    |
|-----------------------|--------------------------------------------------------------------|
| Power Supply          | 100 to 240 VAC, 50/60/400 Hz (nominal)                             |
| Operating Temperature | 0 to 55 °C                                                         |
| Dimensions (W×H×D)    | 432.5 × 44.45 × 585.6 mm                                           |
| Cooling               | Variable speed internal fans (airflow from side and front to rear) |

### System Overview

|                             |                                                                      |
|-----------------------------|----------------------------------------------------------------------|
| Number of Module Slots      | 4                                                                    |
| Number of Supported Outputs | Up to 4                                                              |
| Maximum Total Output Power  | 400 W (N6700B/N6710B), 600 W (N6701A/N6711A), 1200 W (N6702A/N6712A) |
| Maximum Power per Output    | Up to 500 W                                                          |

### Connectivity and Interfaces

|                                   |                       |
|-----------------------------------|-----------------------|
| Standard Communication Interfaces | GPIB, LAN, USB        |
| Command Language                  | SCPI                  |
| LXI Compliance Level              | LXI Class C Compliant |

### Triggering and Synchronization

|                                |                                           |
|--------------------------------|-------------------------------------------|
| Triggering and Synchronization | Advanced hardware and software triggering |
|--------------------------------|-------------------------------------------|

### Command Processing and Timing

|                      |                                                     |
|----------------------|-----------------------------------------------------|
| Programming Features | Automated sequencing of up to 512 output settings   |
| Output Response      | Fast output programming with active downprogramming |

### Options and Accessories

|                       |                                                |
|-----------------------|------------------------------------------------|
| Built-in Measurements | Standard                                       |
| Disconnect Relays     | Optional built-in mechanical disconnect relays |

Physical Characteristics

|                      |    |
|----------------------|----|
| Rack Mount Size (RU) | 1U |
|----------------------|----|

Performance

|                             |                                                                                   |
|-----------------------------|-----------------------------------------------------------------------------------|
| Command Processing Time     | ≤ 1 ms (from receipt of command to start of output change)                        |
| Output to Chassis Isolation | ±240 Vdc maximum                                                                  |
| Remote Sense                | Available on each module (typically compensates for up to 1 V drop per load lead) |

Features

|                   |                                                 |
|-------------------|-------------------------------------------------|
| Output Sequencing | Independent turn-on/turn-off delays per channel |
|-------------------|-------------------------------------------------|

Environmental

|                     |                    |
|---------------------|--------------------|
| Storage Temperature | -30 °C to 70 °C    |
| Operating Altitude  | Up to 2,000 meters |

Compliance

|                   |                                                 |
|-------------------|-------------------------------------------------|
| Safety Compliance | IEC 61010-1, UL 61010-1, CSA C22.2 No. 61010-1  |
| EMC Compliance    | CISPR 11, EN 61326-1, ICES-001, AS/NZS CISPR 11 |

Power

|                        |                                                                                               |
|------------------------|-----------------------------------------------------------------------------------------------|
| Maximum Input Power    | 1000 VA (N6700C) / 1440 VA (N6701C) / 3000 VA (N6702C)                                        |
| Power Factor           | 0.99 (typical at nominal input and full load)                                                 |
| AC Input Voltage Range | 100 - 240 VAC nominal (86 - 264 VAC operating; N6702C output power is derated at 100-120 VAC) |
| AC Input Frequency     | 47 - 63 Hz / 400 Hz (400 Hz supported at 100-120 VAC only)                                    |

Inputs & Outputs

|                  |                                                                                              |
|------------------|----------------------------------------------------------------------------------------------|
| Digital I/O Port | 8-pin terminal block (provides Fault, Inhibit, Trigger I/O, and general purpose digital I/O) |
|------------------|----------------------------------------------------------------------------------------------|

TECHNOLOGY

Modular DC Power System

APPLICATIONS

Automated Test Equipment (ATE) and Production Test

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.