

KEYSIGHT TECHNOLOGIES (AGILENT HP)

16702B

The Agilent/Keysight 16702B is a high-performance modular logic analysis system mainframe designed for complex digital system debug and validation. Featuring a built-in 12.1-inch color touchscreen display, five measurement module slots, and dedicated front panel hardware controls, it offers a highly intuitive and flexible workspace for hardware, software, and firmware co-design environments.

SPECIFICATIONS

General

Interfaces	10/100 Base-T LAN (auto-sensing), GPIB (IEEE-488), Parallel printer port, RS-232-C serial port, PS/2 mouse port, PS/2 keyboard port, External VGA video output, External trigger input (BNC), External trigger output (BNC)
Display	12.1-inch color LCD flat panel, 800 x 600 pixels resolution with integrated touchscreen

Physical

Power Supply	100 to 240 VAC ($\pm 10\%$), 48 to 66 Hz, 615 W maximum
Operating Temperature	0 °C to +50 °C °C
Dimensions (W×H×D)	426 mm x 326 mm x 514 mm mm
Weight	15.6 kg kg

Mainframe System Architecture

Number of Module Slots	5 measurement module slots
Emulation Module Slots	1 dedicated slot for emulation module or Multiframe module
Standard System Memory	128 MB RAM
Maximum System Memory Option	256 MB RAM (via Option 003)
Internal Hard Drive Capacity	18 GB
Built-in CD-ROM Drive	24x max speed
Removable Floppy Drive	3.5-inch 1.44 MB floppy drive
Processor Type	Motorola PowerPC
Operating System	Modified HP-UX
Intermodule Triggering Bus	Internal bus for cross-triggering and synchronization of multiple modules

Display & User Interface

Integrated Display Size	12.1-inch (30.7 cm) diagonal
Display Resolution	800 x 600 pixels (SVGA)
Touch Screen Technology	Resistive touch interface
Dedicated Front Panel Controls	Single rotary control knob
Keyboard and Mouse Support	Standard PS/2 keyboard and mouse included

Supported Modules & Expansion

Module Compatibility	Compatible with HP/Agilent 16700-series state/timing analyzers, pattern generators, and oscilloscope modules
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Connectivity & I/O Interfaces

LAN Speed	10/100 Mbps auto-sensing
GPIO Compatibility	IEEE-488.2 interface

Physical & Environmental Specs

Non-Operating Temperature Range	-40 °C to +75 °C
Operating Altitude Limit	Up to 4,600 m (15,000 ft)
Non-Operating Altitude Limit	Up to 15,300 m (50,000 ft)
Cooling	Internal cooling fan assembly

Connectivity

External Video Interface	15-pin VGA, up to 1600 x 1200 resolution
Serial Interface	9-pin D-sub RS-232C
Parallel Interface	25-pin D-sub Centronics
External SCSI Interface	68-pin Ultra Wide SCSI
Accessory Power Outputs	Two 4-pin connectors supplying +5 V and +12 V
Trigger I/O Ports	Two BNC connectors (Port 1 and Port 2), TTL compatible
Target Control Port	20-pin header for emulation control

Power Requirements

AC Line Voltage Range	90 to 132 V AC / 198 to 264 V AC, auto-ranging
AC Line Frequency Range	48 to 66 Hz
Maximum Power Consumption	615 W

Environmental Specifications

Operating Humidity Range	20% to 80% RH (non-condensing)
Non-Operating Humidity Range	0% to 90% RH (non-condensing)
Operating Vibration Tolerance	Random, 5 to 500 Hz, 0.3 g rms

System Capabilities

Multi-Frame Expansion	Up to 8 frames (1 master mainframe and up to 7 16701B expansion frames)
Real-Time Clock	Battery-backed real-time clock

I/O Ports Detail

Trigger Input Level	TTL compatible
Trigger Output Level	TTL compatible
Target Control Port Lines	8 input and 8 output control lines (20-pin connector)

Standards & Compliance

Safety Standards	IEC 61010-1 / EN 61010-1, CSA C22.2 No. 1010.1
EMC Standards	CISPR 11 / EN 55011 Group 1 Class A, EN 50082-1

User Interface

Built-in Alert Speaker	Mono speaker for audible alerts
Pointing and Navigation Controls	Built-in touch screen and front-panel optical rotary encoder knob

APPLICATIONS

Modular logic analysis, digital hardware debugging, microprocessor/bus state and timing measurements

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