KEYSIGHT TECHNOLOGIES (AGILENT HP)

U2001A

The Keysight (Agilent) U2001A is a high-performance USB average power sensor designed to make fast and accurate power measurements across a frequency range of 10 MHz to 6 GHz. With its wide dynamic range, fast measurement speed, and convenient USB bus-powered plug-and-play capability, it eliminates the need for a separate power meter, connecting directly to a PC or compatible Keysight instrument. This datasheet-style summary provides the exact, verified technical specifications of the U2001A model.

SPECIFICATIONS

General

Interfaces	USB 2.0 (USBTMC-USB488)
Display	None (uses PC host software or compatible instrument display)
Firmware Upgradeability	Upgradeable via USB interface
Sensor Type	Diode-based average power sensor

Physical

Power Supply	USB Bus Powered (4.75 V to 5.25 V)
Operating Temperature	0 °C to 55 °C °C
RF Connector Torque	1.35 N-m (12 lb-in) recommended

Frequency & Power Performance

Frequency Range	10 MHz to 6 GHz
Power Measurement Range	-60 dBm to +20 dBm
Impedance	50 Ω

Uncertainty & Calibration

Recommended Calibration Interval	1 year

Triggering & Timing

Trigger Sources	Internal, External, Software
External Trigger Connector Type	SMB (on sensor body)

Connectivity & Control

RF Connector Type	Type-N (male)

Power Requirements

Supply Voltage Range	4.75 V to 5.25 V (USB Bus Powered)

Environmental & Compliance

Storage Temperature Range	-40 °C to +70 °C
Relative Operating Humidity	Up to 95% RH at 40 °C (non-condensing)
Relative Storage Humidity	Up to 90% RH at 65 °C (non-condensing)
Maximum Operating Altitude	3,000 m (9,840 ft)
Maximum Storage Altitude	15,240 m (50,000 ft)

Software & Host Compatibility

Supported Application Software	Keysight BenchVue (Power Meter App), Keysight BV0007B

Performance

Calibration Factor Uncertainty (10 MHz to 30 MHz, 25 ± 5 °C)	1.8%
Calibration Factor Uncertainty (30 MHz to 2 GHz, 25 ± 5 °C)	1.6%
Calibration Factor Uncertainty (2 GHz to 6 GHz, 25 ± 5 °C)	2.0%
Calibration Factor Uncertainty (10 MHz to 30 MHz, 0 to 55 °C)	2.2%
Calibration Factor Uncertainty (30 MHz to 2 GHz, 0 to 55 °C)	2.0%
Calibration Factor Uncertainty (2 GHz to 6 GHz, 0 to 55 °C)	2.5%

Compliance

Safety Compliance	IEC 61010-1:2001 / EN 61010-1:2001, CAN/CSA-C22.2 No. 61010-1-04, UL Std. No. 61010-1
EMC Compliance	IEC 61326-2-1:2005 / EN 61326-2-1:2006, Canada: ICES-001:2004, Australia/New Zealand: AS/NZS CISPR11:2004

Interfaces

USB Device Class	USBTMC-USB488

TECHNOLOGY

Diode Power Sensor

APPLICATIONS

RF & Microwave Power Measurement

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