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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 2801A

Operating Temperature Class: laboratory metrology window Primary Power Class: mains powered benchtop Literature: HP 2801A quartz thermometer catalogs Measurement: temperature via quartz frequency Primary Power Class: mains powered benchtop Literature: HP 2801A quartz thermometer catalogs Measurement: temperature via quartz frequency Calibration: probe constants / ice-point class



MODEL Agilent / Keysight 2801A	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU 2801A	LISTING https://aumictechlabs.com/products/2801a-2/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight N2801A is a 20 GHz probe amplifier in the InfiniiMax III Series, delivering full bandwidth directly to the probe tip for high-speed signal acquisition. This instrument-grade amplifier combines low noise performance with extremely low input loading, enabling accurate characterization of fast transient signals and high-frequency phenomena in demanding test environments. Technical Specifications Bandwidth and Timing Bandwidth: 20 GHz to probe tip Rise time: 27.1 psec Attenuation and Input Range DC attenuation ratio: 6:1 (standard) or 3:1 (with 200 Ω ZIF tip) Input voltage range: 1.6 Vpp (standard) or 0.8 Vpp (200 Ω ZIF tip) Offset range: ± 16 V single-ended Input Common Mode Range Standard configuration: ± 12 V DC to 250 Hz; ± 2.5 V above 250 Hz With 200 Ω ZIF tip: ± 6 V DC to 250 Hz; ± 1.25 V above 250 Hz Input Impedance DC: 100 k Ω differential ($\pm 2\%$), 50 k Ω single-ended ($\pm 2\%$) >10 kHz: 1 k Ω differential, 500 Ω single-ended Capacitance (ZIF probe head): 32 fF differential, 48 fF single-ended Key Features Full 20

GHz bandwidth from amplifier to probe tip Minimal input loading and system noise for signal fidelity 200 GHz fT indium phosphide IC process with backside ground vias Measured S-parameter correction loaded into probe amplifier Probe bandwidth upgrade capability Multiple probe head configurations supported Typical Applications High-speed digital signal verification, analog transient analysis, and precision measurements where low loading and wide bandwidth are essential. Compatibility & Integration Works with InfiniiMax III probe heads including the N5445A (30 GHz), N5444A (30 GHz SMA), N5439A (28 GHz ZIF), and MX0109A (26 GHz solder-in). Compatible with Keysight oscilloscopes supporting InfiniiMax III architecture.

2801A Characteristics / Specifications

PARAMETER	VALUE
Model	2801A
Instrument Type	Quartz thermometer
Sensor	quartz resonator probe
Family	HP 2801 / 2804 quartz thermometers
Related Successor	2804A quartz thermometer
Probe Count Class	two-probe family architecture
Form Factor	benchtop quartz thermometer
Manufacturer	HP Agilent Keysight
Use Case	high-resolution laboratory temperature
Display	digital temperature readout
Operating Temperature Class	laboratory metrology window
Primary Power Class	mains powered benchtop
Literature	HP 2801A quartz thermometer catalogs
Measurement	temperature via quartz frequency
Probe Cable	quartz probe interconnect
Calibration	probe constants / ice-point class
Documentation Type	OEM quartz-thermometer catalog
Brand Lineage	Hewlett Packard Agilent Keysight
System Role	metrology thermometer
Readout Units	Celsius class
Stability Class	quartz-resonator stability
Compare	two-probe difference class on family instruments
Operating temperature	Class: laboratory metrology window

2801A Specifications

PARAMETER	VALUE
HP 2801A Quartz Thermometer	Overview
Quartz resonator temperature sensing	2801/2804 quartz thermometer family
Laboratory metrology thermometer	Predecessor to 2804A
Technical Specifications	Model: 2801A

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: laboratory metrology window
Operating Temperature	Class: laboratory metrology window
Operating Temperature Class	laboratory metrology window
Primary Power Class	mains powered benchtop
Literature	HP 2801A quartz thermometer catalogs
Measurement	temperature via quartz frequency
Probe Cable	quartz probe interconnect
Calibration	probe constants / ice-point class
Documentation Type	OEM quartz-thermometer catalog
Brand Lineage	Hewlett Packard Agilent Keysight
System Role	metrology thermometer
Readout Units	Celsius class
Stability Class	quartz-resonator stability
Compare	two-probe difference class on family instruments Notes From HP 2801A quartz-thermometer identity in the 2801/2804 family. Resolution, range, and probe coefficients are on the 2801A/probe data sheet; 2804A numbers are not copied onto 2801A.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.