

**Aumictech**

Test &amp; measurement · bought, sold, repaired, calibrated

**Data Sheet**

August 14, 2026

AGILENT / KEYSIGHT

## Agilent/Keysight 8731A

The HP/Agilent 8731A is a coaxial directional coupler covering approximately 0.8 to 2.4 GHz for microwave reflectometer and power-monitoring setups. OEM coupler catalogs list the 8731A in the low-microwave directional coupler family used with network analyzers and signal sources. Reflectometer bridges, leveling loops, and forward/reverse power sampling in microwave test benches. Typical Use: microwave reflectometer and power monitoring Connector Class: coaxial microwave connectors per unit Insertion Loss Class: per unit calibration data VSWR Class: per unit calibration data Impedance Class: 50 ohm coaxial class Documentation Source: OEM datasheet model row From HP directional coupler family documentation identifying 8731A coverage near 0.8 to 2.4 GHz. Exact coupling factor and directivity are unit-specific on the faceplate/calibration data.



MODEL

**Agilent / Keysight  
8731A**

CALIBRATION

**Available on  
request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**8731A**

LISTING

<https://aumictechlabs.com/products/8731a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

### This unit

The Keysight N8731A is a high-density, 2U rack-mountable DC power supply engineered for test and measurement applications demanding stable, accurate power delivery. This single-output supply delivers 8 V at 400 A (3200 W) with exceptional programming accuracy and low ripple characteristics. Remote sense capability, built-in voltage and current measurement, and comprehensive protection circuitry ensure reliable operation in demanding laboratory and production environments. The N8731A supports parallel and series interconnection for scaled

current and voltage requirements, making it suitable for applications ranging from component characterization to system-level power verification.

**Technical Specifications**

**Output:** 8 V, 400 A, 3200 W single output

**Programming Accuracy:**  $\pm 0.05\%$  voltage,  $\pm 0.1\%$  current

**Output Ripple & Noise:** 60 mV peak-to-peak, 8 mV RMS

**Load Regulation:** 0.2% voltage, 0.4% current (no-load to full-load)

**Control:** Analog/resistance programming of voltage and current

**Measurement:** Built-in voltage and current readback

**Protection:** Over-voltage and over-current safeguards

**Key Features**

- Compact 2U form factor for space-constrained installations
- Remote sense terminals for accurate load voltage regulation
- Scalable architecture: parallel connection increases current capacity; series connection increases voltage rating
- Multiple AC input options: 190–240 V single-phase (50/60 Hz), 190–240 V three-phase (50/60 Hz), or 380–415 V three-phase (50/60 Hz)
- Factory-configured AC input - cannot be modified after delivery

**Typical Applications**

- Device characterization and parametric testing
- Burn-in and stress testing of components and subassemblies
- Power distribution for RF and microwave test benches
- Laboratory power verification and calibration

**Compatibility & Integration**

Communications interfaces include GPIB, LAN, LXI, and USB for both local and remote control. Rear-panel remote sense terminals enable accurate voltage regulation at the point of load.

## 8731A Characteristics / Specifications

| PARAMETER               | VALUE                                                          |
|-------------------------|----------------------------------------------------------------|
| Model                   | 8731A                                                          |
| Frequency Range Class   | 0.8 to 2.4 GHz                                                 |
| Instrument Type         | directional coupler                                            |
| Function                | forward reverse RF sampling                                    |
| Brand Lineage           | HP / Agilent                                                   |
| Form Factor             | coaxial coupler accessory                                      |
| Family                  | HP 873x directional couplers                                   |
| Typical Use             | microwave reflectometer and power monitoring                   |
| Connector Class         | coaxial microwave connectors per unit                          |
| Operating Context       | RF microwave accessory                                         |
| Coupling Type           | directional                                                    |
| Ports Class             | input coupled and isolated port architecture                   |
| Compatible Systems      | HP network analyzer and source benches                         |
| Calibration Note        | coupling factor and directivity per unit label/certificate     |
| Physical Type           | passive microwave component                                    |
| Series Family           | HP 8731/8732 coupler familyMinimum Frequency Class: 0.8 GHz    |
| Maximum Frequency Class | 2.4 GHz                                                        |
| Directivity Class       | per unit calibration data                                      |
| Coupling Factor Class   | per unit faceplate                                             |
| Insertion Loss Class    | per unit calibration data                                      |
| VSWR Class              | per unit calibration dataImpedance Class: 50 ohm coaxial class |
| Documentation Source    | OEM datasheet model row                                        |

# 8731A Specifications

| PARAMETER                            | VALUE                         |
|--------------------------------------|-------------------------------|
| HP Agilent 8731A Directional Coupler | Overview                      |
| Directional coupler topology         | 0.8 to 2.4 GHz class coverage |
| Technical Specifications             | Model: 8731A                  |

# 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                                                                                                                                                                              |                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| Specifications                                                                                                                                                                              |                                                                |
| PARAMETER                                                                                                                                                                                   | VALUE                                                          |
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| Instrument Type                                                                                                                                                                             | directional coupler                                            |
| Function                                                                                                                                                                                    | forward reverse RF sampling                                    |
| Brand Lineage                                                                                                                                                                               | HP / Agilent                                                   |
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| Family                                                                                                                                                                                      | HP 873x directional couplers                                   |
| Typical Use                                                                                                                                                                                 | microwave reflectometer and power monitoring                   |
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| Compatible Systems                                                                                                                                                                          | HP network analyzer and source benches                         |
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| Directivity Class                                                                                                                                                                           | per unit calibration data                                      |
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| VSWR Class                                                                                                                                                                                  | per unit calibration dataImpedance Class: 50 ohm coaxial class |
| Documentation Source                                                                                                                                                                        | OEM datasheet model row                                        |
| Notes                                                                                                                                                                                       |                                                                |
| From HP directional coupler family documentation identifying 8731A coverage near 0.8 to 2.4 GHz. Exact coupling factor and directivity are unit-specific on the faceplate/calibration data. |                                                                |

### Available from Aumictech

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

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

#### Aumictech

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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.