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**Data Sheet**

August 15, 2026

AGILENT / KEYSIGHT

# Agilent/Keysight 8477A

HP Agilent 8477A Analog Power Meter for Crystal Detectors The HP 8477A is an analog power meter designed to operate with HP 8470-series crystal detectors (8470B class 10 MHz to 18 GHz). OEM microwave detector/power-meter catalogs list 8477A as the matched analog meter that displays detected RF power from the crystal-detector millivolt output with calibrated ranges for 8470B/8472B/8473B detectors. Broadband RF/microwave power indication with coaxial crystal detectors in bench and swept-frequency setups. The HP 8477A is an analog power meter designed to operate with HP 8470-series crystal detectors (8470B class 10 MHz to 18 GHz). OEM microwave detector/power-meter catalogs list 8477A as the matched analog meter that displays detected RF power from the crystal-detector millivolt output with calibrated ranges for 8470B/8472B/8473B detectors. Broadband RF/microwave power indication with coaxial crystal detectors in bench and swept-frequency setups. Analog meter for 8470-series crystal detectors Matched to 8470B 10 MHz to 18 GHz detector class



MODEL

**Agilent / Keysight  
8477A**

CALIBRATION

**Available on  
request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**8477A**

LISTING

<https://aumictechlabs.com/products/8477a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

## This unit

The Agilent/Keysight 8477A is a range calibrator engineered to verify and maintain accuracy in the 432A power meter across all measurement ranges. Operating from 0.01 GHz to 50 GHz, this tool delivers precise calibration for power meters and crystal detectors, ensuring traceable and consistent measurement results in RF and microwave systems. Technical Specifications Frequency

Range: 0.01 GHz to 50 GHz Connector: 2.4mm(m) coaxial Power Input: 115 VAC or 230 VAC  $\pm 10\%$ , 48–66 Hz Power Consumption: Approximately 3 watts

**Key Features**

- Verifies full-scale meter readings on all measurement ranges
- Enables meter tracking to maintain calibration over time
- Provides accurate calibration for crystal detectors and power measurement systems
- Dual-voltage operation (115/230 VAC selectable) supports global deployment
- Low power consumption minimizes thermal effects and operational overhead

**Typical Applications**

The 8477A is a calibration reference in metrology labs and field service operations where verification of power meter accuracy is critical. Its broad frequency coverage supports validation across UHF, microwave, and millimeter-wave measurement bands.

**Compatibility & Integration**

Designed primarily for integration with the Agilent/Keysight 432A power meter. Compatible with crystal detector-based measurement systems. Connects via 2.4mm(m) coaxial interface.

## 8477A Characteristics / Specifications

| PARAMETER                   | VALUE                                                |
|-----------------------------|------------------------------------------------------|
| Model                       | 8477A                                                |
| Instrument Type             | Analog power meter                                   |
| Detector Family             | HP 8470 series crystal detectors                     |
| Related Detector 8470b      | 10 MHz to 18 GHz                                     |
| Related Detector 8472b      | TypeNcrystal detector class                          |
| Related Detector 8473b      | 3.5 mm crystal detector class                        |
| Input                       | crystal detector millivolt output                    |
| Display                     | analog meter                                         |
| Manufacturer                | HP Agilent Keysight                                  |
| Use Case                    | RF microwave power indication                        |
| Frequency Coverage Class    | detector limited (8470B 10 MHz to 18 GHz)            |
| Form Factor                 | analog meter instrument                              |
| Power                       | line powered analog meter                            |
| Operating Temperature Class | 0 to 55 C laboratory                                 |
| Related Thermistor Meter    | 432A/478A thermistor power meter family              |
| Related Digital Meter       | 436A/437B power meters                               |
| Literature                  | HP 8477A analog power meter / 8470 detector catalogs |
| Connector To Detector       | coaxial detector cable                               |
| Calibration                 | meter ranges matched to 8470-series detectors        |
| Swept Use                   | compatible with sweepers when detector is used       |
| Brand Lineage               | Hewlett Packard Agilent Keysight                     |
| Documentation Type          | OEM datasheet and catalog specifications             |
| Operating temperature       | Class: 0 to 55 C laboratory                          |

# 8477A Specifications

| PARAMETER                | VALUE                                                                                                       |
|--------------------------|-------------------------------------------------------------------------------------------------------------|
| Applications             | Broadband RF/microwave power indication with coaxial crystal detectors in bench and swept-frequency setups. |
| Key Features             | Analog meter for 8470-series crystal detectors                                                              |
| Technical Specifications | Model: 8477A                                                                                                |

## General Specifications & Supplementary Characteristics

| PARAMETER                   | VALUE                                                                                                                                                                                                                                                                           |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating temperature       | Class: 0 to 55 C laboratory                                                                                                                                                                                                                                                     |
| Operating Temperature       | Class: 0 to 55 C laboratory                                                                                                                                                                                                                                                     |
| Operating Temperature Class | 0 to 55 C laboratory                                                                                                                                                                                                                                                            |
| Related Thermistor Meter    | 432A/478A thermistor power meter family                                                                                                                                                                                                                                         |
| Related Digital Meter       | 436A/437B power meters                                                                                                                                                                                                                                                          |
| Literature                  | HP 8477A analog power meter / 8470 detector catalogs                                                                                                                                                                                                                            |
| Connector To Detector       | coaxial detector cable                                                                                                                                                                                                                                                          |
| Calibration                 | meter ranges matched to 8470-series detectors                                                                                                                                                                                                                                   |
| Swept Use                   | compatible with sweepers when detector is used                                                                                                                                                                                                                                  |
| Brand Lineage               | Hewlett Packard Agilent Keysight                                                                                                                                                                                                                                                |
| Documentation Type          | OEM datasheet and catalog specifications Notes Identity and 8470-series crystal-detector matching from HP microwave detector and analog power-meter catalog listings. Absolute power accuracy is detector-plus-meter and is stated on the 8470B/8477A detector/meter pair data. |

# 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                                                |
| Model                                                                                                                                                                                                                            | 8477A                                                |
| Instrument Type                                                                                                                                                                                                                  | Analog power meter                                   |
| Detector Family                                                                                                                                                                                                                  | HP 8470 series crystal detectors                     |
| Related Detector 8470b                                                                                                                                                                                                           | 10 MHz to 18 GHz                                     |
| Related Detector 8472b                                                                                                                                                                                                           | TypeNcrystal detector class                          |
| Related Detector 8473b                                                                                                                                                                                                           | 3.5 mm crystal detector class                        |
| Input                                                                                                                                                                                                                            | crystal detector millivolt output                    |
| Display                                                                                                                                                                                                                          | analog meter                                         |
| Manufacturer                                                                                                                                                                                                                     | HP Agilent Keysight                                  |
| Use Case                                                                                                                                                                                                                         | RF microwave power indication                        |
| Frequency Coverage Class                                                                                                                                                                                                         | detector limited (8470B 10 MHz to 18 GHz)            |
| Form Factor                                                                                                                                                                                                                      | analog meter instrument                              |
| Power                                                                                                                                                                                                                            | line powered analog meter                            |
| Operating Temperature Class                                                                                                                                                                                                      | 0 to 55 C laboratory                                 |
| Related Thermistor Meter                                                                                                                                                                                                         | 432A/478A thermistor power meter family              |
| Related Digital Meter                                                                                                                                                                                                            | 436A/437B power meters                               |
| Literature                                                                                                                                                                                                                       | HP 8477A analog power meter / 8470 detector catalogs |
| Connector To Detector                                                                                                                                                                                                            | coaxial detector cable                               |
| Calibration                                                                                                                                                                                                                      | meter ranges matched to 8470-series detectors        |
| Swept Use                                                                                                                                                                                                                        | compatible with sweepers when detector is used       |
| Brand Lineage                                                                                                                                                                                                                    | Hewlett Packard Agilent Keysight                     |
| Documentation Type                                                                                                                                                                                                               | OEM datasheet and catalog specifications             |
| Notes                                                                                                                                                                                                                            |                                                      |
| Identity and 8470-series crystal-detector matching from HP microwave detector and analog power-meter catalog listings. Absolute power accuracy is detector-plus-meter and is stated on the 8470B/8477A detector/meter pair 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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NIST-traceable calibration · SAM registered ·  
30-day returns  
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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.