Product Fact Sheet

Keysight N8480 Series Thermocouple Power Sensors

With best-in-class linearity, industry's widest frequency and dynamic range, and EEPROM capability. Keysight Technologies, Inc. N8480 series sensors are widely used in the wireless communications, electronics manufacturing, aerospace/defense applications, and beyond.

Additional N8488A is now available to meet all your test needs

Keysight's new N8488A with widest frequency coverage: 10 MHz to 67 GHz (usable up to 70 GHz)

Key features

- World's first AC-coupled sensor with widest frequency range (N8488A)
- High accurate results with best-in-class power linearity of less than 1%
- The industry's widest dynamic range in a thermocouple power measurement solution
- Calibrate easily with automatic upload of calibration factors using the built-in EEPROM feature
- Easily replace the 8480 Series sensors with SCPI code compatibility (with option CFT, except for N8488A)
- Get backward compatibility with Keysight EPM Series (new N1913A/14A, E4418B/19B), EPM-P Series (E4416A/17A) and P-Series (N1911A/12A) power meters

Note: N8480 sensors are not compatible with legacy 43x power meters

Key specifications

Frequency range	100 kHz to 67 GHz (usable up to 70 GHz, sensor dependent)
Dynamic range	55 dB (–35 dBm to +44 dBm, sensor dependent)
Power linearity	< 1%

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Ordering information

Model	Frequency range	Power range	Connector type	Replaced model
N8481A	10 MHz to 18 GHz	–35 to +20 dBm (STD) –30 to +20 dBm (CFT)	N-type (male)	8481A
N8482A	100 kHz to 6 GHz	–35 to +20 dBm (STD) –30 to +20 dBm (CFT)	N-type (male)	8482A
N8485A	10 MHz to 26.5 GHz	–35 to +20 dBm (STD) –30 to +20 dBm (CFT)	3.5 mm (male)	8485A
N8487A	50 MHz to 50 GHz	–35 to +20 dBm (STD) –30 to +20 dBm (CFT)	2.4 mm (male)	8487A
N8481B	10 MHz to 18 GHz	–5 to +44 dBm (STD) 0 to +44 dBm (CFT)	N-type (male)	8481B
N8482B	100 kHz to 6 GHz	–5 to +44 dBm (STD) 0 to +44 dBm (CFT)	N-type (male)	8482B
N8481H	10 MHz to 18 GHz	–15 to +35 dBm (STD) –10 to +35 dBm (CFT)	N-type (male)	8481H
N8482H	100 kHz to 6 GHz	–15 to +35 dBm (STD) –10 to +35 dBm (CFT)	N-type (male)	8482H
N8486AR	26.5 GHz to 40 GHz	–35 to +20 dBm (STD) –30 to +20 dBm (CFT)	Waveguide	R8486A
N8486AQ	33 GHz to 50 GHz	–35 to +20 dBm (STD) –30 to +20 dBm (CFT)	Waveguide	Q8486A
N8488A	10 MHz to 67 GHz	–35 to + 20 dBm (STD)	1.85 mm (male)	–

Options description:

1. STD - N8480 sensors with EEPROM, automatic loading of cal factors to power meter.
2. CFT - N8480 sensors with calibration factor data provided on the label attached to the sensor. Similar functionality as the 8480 series.

Accessories, calibration and documentation options

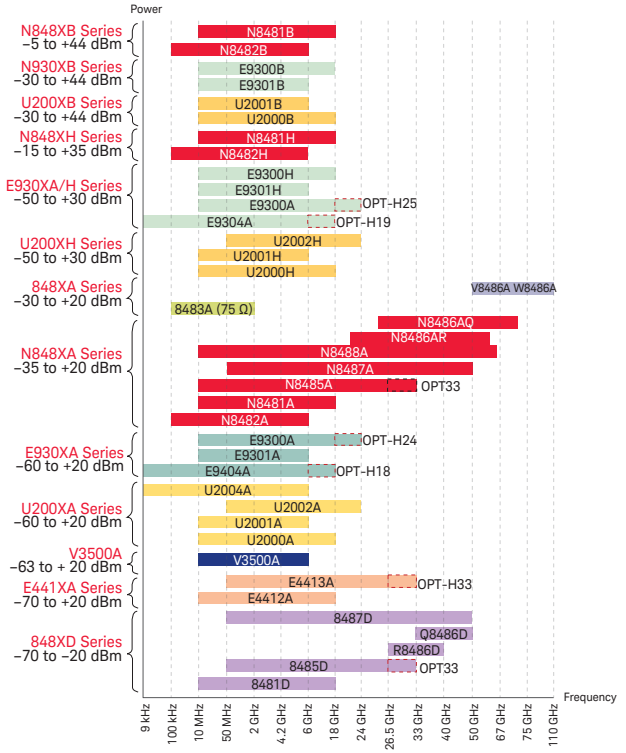
Type		Description
Connectors	Option 100	Type-N (male) connector for N8481A/ N8482A/N8481B/N8482B/N8481H/ N8482H
		3.5 mm (male) connector for N8485A
		2.4 mm (male) connector for N8487A
		Waveguide connector for N8486AR/ N8486AQ
		1.85 mm (male) connector for N8488A
	Option 200	APC-7 (male) connector for N8481A only
Cables	11730A/B/C/ D/E/F cable	For EPM [1] Series power meters: 1.5 m (5 ft)/3.0 m (10 ft)/6.1 m (20 ft)/15.2 m (50 ft)/30.5 m (100 ft)/61.0 m (200 ft), grey
	E9288A/B/C cable	For EPM [1] and EPM-P Series power meters: 1.5 m (5 ft)/3.0 m (10 ft)/10.0 m (31 ft), blue
	N1917A/B/C cable	For P-Series power meters: 1.5 m (5 ft)/3.0 m (10 ft)/10.0 m (31 ft)
Calibration	Option 1A7	ISO 17025 calibration with test data
	Option A6J	ANSI Z540 calibration with test data
Warranty	Option R-51B-001-3C	Extended warranty and service plan from 1 year to 3 years
	Option R-51B-001-5C	Extended warranty and service plan from 1 year to 5 years
Documen-tation	Option OB1	Operating and service guide (English)
	Option ABJ	Operation and service guide (Japanese)

1. EPM Series includes the N1913A/14A and E4418B/19B.

Three-Year Warranty
www.keysight.com/find/ThreeYearWarranty
Keysight's commitment to superior product quality and lower total cost of ownership. The only test and measurement company with three-year warranty standard on all instruments, worldwide.

Keysight Assurance Plans
www.keysight.com/find/AssurancePlans
Up to five years of protection and no budgetary surprises to ensure your instruments are operating to specification so you can rely on accurate measurements.

Keysight average power sensors



Legend

- (NEW) N848X average thermocouple sensor
- 848X thermo-couple sensor
- E930X 2-path diode true-average sensor
- 848XD average diode sensor
- E441X 1-path diode CW- only sensor
- U200X USB sensors
- V3500A Handheld RF power meter

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This information is subject to change without notice.
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