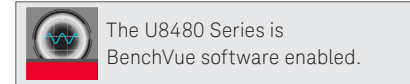
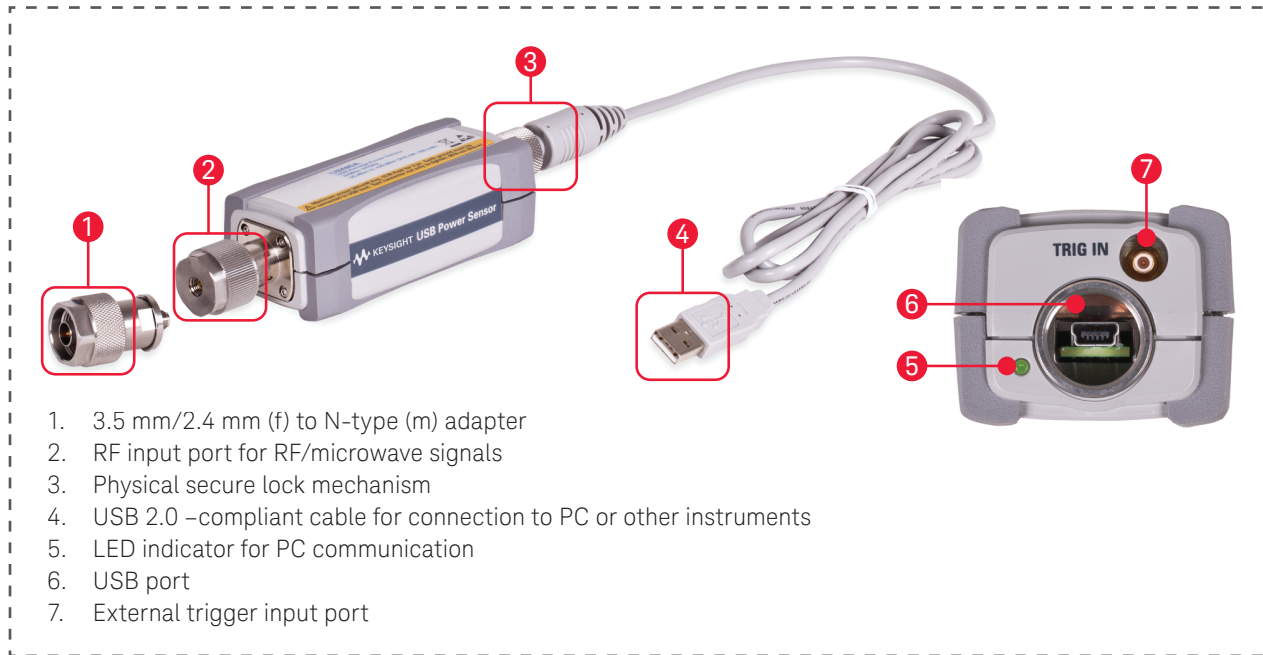


Keysight U8480 Series USB Thermocouple Power Sensors



Improve your power measurement accuracy and throughput



1. 3.5 mm/2.4 mm (f) to N-type (m) adapter
2. RF input port for RF/microwave signals
3. Physical secure lock mechanism
4. USB 2.0 –compliant cable for connection to PC or other instruments
5. LED indicator for PC communication
6. USB port
7. External trigger input port

Key features

Feature	Benefit
Broadband (DC/10 MHz to 18/33/50/67/120 GHz)	It covers low frequency applications to millimeter wave applications with one sensor
Measurement speed of 900 readings/second	Improve production throughput and lower cost of test with the world's fastest USB thermocouple power sensor
Optional DC coupled option	Cover a broad range of applications, such as EMC, metrology and test setup calibrations
Real time measurement uncertainty (MU) feature	Simultaneously display power measurements and their MU; remove the need for manual MU calculations
S-parameter and gamma correction function	Improve measurement accuracy by correcting the mismatch errors caused by inserted components between the device-under-test and the power sensor
Best accuracy/repeatability with thermocouple sensing technology	Suitable for applications that request best accuracy or tight tolerance, such as test system or instrument calibrations

A legacy of excellence

Based on the same front end design as the Keysight 8480 and N8480 Series power sensors, the new U8480 Series offers improved specifications, including a measurement speed more than 20 times faster than the legacy series (900 readings/sec vs 40 readings/sec).

Now with USB capabilities, the U8480 Series plugs directly into your PC or USB-enabled Keysight instrument and gives you the capability to measure power without the need of an external power meter or power supply.



The U8480 Series is supported by the Keysight BenchVue software BV0007B Power Meter/Sensor Control and Analysis App. Control your USB power sensor to log data and visualize measurements in a wide array of display options.

Key specifications

Options	Description
Frequency range	DC/10 MHz to 18/33/50/67/120 GHz
Power range	-35 to +20 dBm
Damage level (RF)	25 dBm (average power), 4 VDC 15 W, 2 μ s duration (peak power)
Damage level (DC)	AC coupled (Option 100), 20 V DC coupled (Option 200), 4 V
Measurement speed	900 readings/sec
Power linearity	< 0.50% (-5 to +15 dBm) < 0.55% (+15 to +20 dBm)
Zero set	$\pm$ 25 nW, $\pm$ 35 nW (U8489A)
Zero drift	$\pm$ 5.5 nW
Measurement noise	$\pm$ 4.5 nW



Ordering information

Model	Description
U8481A	USB thermocouple power sensor (Type-N)
U8481A-100	Standard option – 10 MHz to 18 GHz
U8481A-200	DC coupled option – DC to 18 GHz
U8485A	USB thermocouple power sensor (3.5 mm)
U8485A-100	Standard option – 10 MHz to 33 GHz
U8485A-200	DC coupled option – DC to 33 GHz
U8487A	USB thermocouple power sensor (2.4 mm)
U8487A-100	Standard option – 10 MHz to 50 GHz
U8488A	USB thermocouple power sensor (1.85 mm)
U8488A-100	Standard option – 10 MHz to 67 GHz
U8489A	USB thermocouple power sensor (1.0 mm)
U8489A-200	DC coupled option - DC to 120 GHz
U8489A-501	1.0 mm (f) to N-Type (m) adapter

Standard shipped items

Power sensor cable 5 ft (1.5 m), default cable length
Trigger cable, BNC male to SMB female, 50 Ω , 1.5 m
Certificate of calibration
Documentation CD-ROM
Keysight Instrument Control DVD (contains IO Libraries Suite, Command Expert, BenchVue software platform, and 30-day free trial of BenchVue power meter/sensor control and analysis app)
U8485A: 3.5 mm (f) to N-Type (m) adapter ¹
U8487A/88A: 2.4 mm (f) to N-Type (m) adapter ¹

1. Not applicable to U8481A.

Options	Description
Travel kits	
U2000A-201	Transit case
U2000A-202	Soft carrying case
U2000A-203	Holster
U2000A-204	Soft carrying pouch
Cables (selectable during sensor purchase)	
U2000A-301	Power sensor cable, 5 ft (1.5 m)
U2000A-302	Power sensor cable, 10 ft (3 m)
U2000A-303	Power sensor cable, 16.4 ft (5 m)
Cables	
U2031A	Power sensor cable, 5 ft (1.5 m)
U2031B	Power sensor cable, 10 ft (3 m)
U2031C	Power sensor cable, 16.4 ft (5 m)
U2032A	BNC male to SMB female trigger cable, 50 Ω , 1.5 m
Calibration	
U848xA-1A7	ISO 17025 compliant calibration and test data
U848xA-A6J	ANSI Z540 compliant calibration and test data
U848xA-UK6	Commercial calibration certificate with test data
Power measurement software	
BV0007B	BenchVue Power meter/sensor control and analysis app license

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Unlocking Measurement Insights

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© Keysight Technologies, 2017
Published in USA, December 1, 2017
5991-1383EN
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