

Keysight 53147A, 53148A, 53149A Microwave

The Keysight 53140 Series includes full-featured 20 GHz/26.5 GHz/46 GHz continuous wave (CW) microwave frequency counter, a true power meter, and a dc DVM all in one small convenient package.



53140 Series microwave frequency Counter/Power meter/DVM

Key features

- Two channel counters offering one channel from 10 Hz to 125 MHz and the ultra-wideband continuous wave (CW) microwave input channel from 50 MHz to 20/26.5/46 GHz
- True Power Meter with a selection of sensors and DC DVM for Automatic Gain Control (AGC) and Power Supply measurements
- Portable and rugged with an optional battery for field use

Product specifications

Model	Microwave bandwidth	Additional measurements	Resolution	Additional features	Interfaces
53147A	20 GHz	DC volts and power	1 s/1 Hz	Battery for portability	GPIO, RS-232
53148A	26.5 GHz	DC volts and power	1 s/1 Hz	Battery for portability	GPIO, RS-232
53149A	46 GHz	DC volts and power	1 s/1 Hz	Battery for portability	GPIO, RS-232

Sensors for 5314xA microwave counters

Although several of the sensor models are in disco-sale status, the customer service representative (CSR) can enter an order for those sensors for use with 5314xA microwave counters. The CSR will need to submit for a passcode that will get routed for approval and provided to complete the order.

Model	Frequency range	Connector	Zero set
25 W sensors: 1 mW to 25 W (0 dBm to +44 dBm)			
8481B (Disco)	10 MHz to 18 GHz	N (m)	±50 µW
3 W sensors: 100 µW to 3 W (-10 dBm to +35 dBm)			
8481H (Disco)	10 MHz to 18 GHz	N (m)	±5 µW
100 mW sensors: 1 µW to 100 mW (-30 dBm to +20 dBm)			
8485A (Disco)	50 MHz to 26.5 GHz	APC -3.5 mm (m)	±50 nW
8481A (Disco)	10 MHz to 18 GHz	N (m)	±50 nW
8482A (Disco)	100 kHz to 4.2 GHz	N (m)	±50 nW
8487A (Disco)	50 MHz to 50 GHz	2.4 mm (m)	±50 nW
High sensitivity sensors: 100 pW to 10 µW (-70 dBm to -20 dBm)			
8481D	10 MHz to 18 GHz	N (m)	±20 pW
8485D	50 MHz to 26.5 GHz	APC -3.5 mm (m)	±20 pW
8485D Opt 033	50 MHz to 33 GHz	APC -3.5 mm (m)	±20 pW
8487D	50 MHz to 50 GHz	2.4 mm (m)	±20 pW

53140A Series options

Options and accessories	Description
001	High stability oven timebase
002	Battery and DC input
007 (53146A)	Soft carrying case for 5314xA microwave counters
1CM (53147A-67001)	Rack mount kit

For more details on Keysight frequency counters and ordering information see “Keysight 53140 Series microwave counter, power meter and DVM in one portable package”, literature number 5988-0300EN.

To find a distributor in your area, go to:

www.keysight.com/find/distributors

For more information on Keysight frequency counters, please visit: www.keysight.com/find/counters

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