Quick Fact Sheet

# Agilent 53147A, 53148A, 53149A Microwave

## The Agilent 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

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# Agilent 53147A, 53148A, 53149A Microwave | Frequency Counter/Power Meter/DVM

## 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 | GPIB, RS-232 |
| 53148A | 26.5 GHz | DC volts and power | 1 s/1 Hz | Battery for portability | GPIB, RS-232 |
| 53149A | 46 GHz | DC volts and power | 1 s/1 Hz | Battery for portability | GPIB, 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 Agilent frequency counters and ordering information see *"Agilent 53140 Series microwave counter, power meter and DVM in one portable package"*, literature number 5988-0300EN.

For more information on Agilent frequency counters, please visit: **www.agilent.com/find/counters**

To find a distributor in your area, go to: **www.agilent.com/find/distributors**

### Recommended service options

Additional two years of Return-to-Agilent warranty
Additional two years of Return-to-Agilent calibrations
For more information go to **www.agilent.com/find/removealldoubt**

Technical data, availability and pricing subject to change without notice.
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