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## USB Power Sensor PS310

### Description

Power sensor PS310 is a thermally stabilized radio frequency CW power detector with USB connectivity, 3-GHz bandwidth and 50-dB dynamic range.

Acquisition type, averaging and running averaging parameters are user-definable in a command-line interface (CLI).

The sensor is also compatible with any Android portable device with an USB OTG port.

### Features

- 10 MHz – 3 GHz, 50 dB dynamic range
- Thermally stabilized detection circuit
- Non-zeroing, pre-calibrated
- USB powered
- Open and simple serial port communication
- Compatibility with instrument control software
- Compatible with Android portable devices with an USB OTG port
- Small size aluminium enclosure (100 x 44 x 20 mm)
- Designed and assembled in EU

### Electrical specifications

Frequency range	10 MHz to 3GHz
Dynamic range	50 dB
Max. input power	+10 dBm
Min. input power	- 40 dBm
Input impedance	50 $\Omega$
Operating temperature	10°C to 40°C
Max. current (via USB port)	500 mA
RF input connector type	SMA Female*
USB connector type	USB-A

\*SMA M-to-M adapter is included.

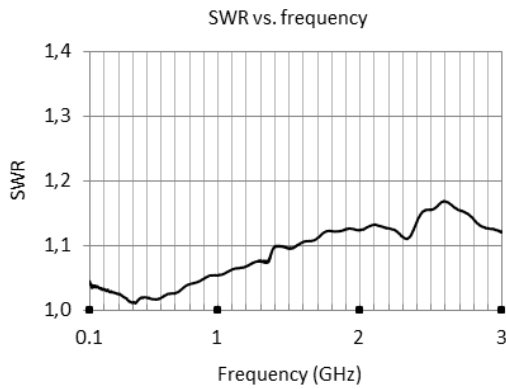
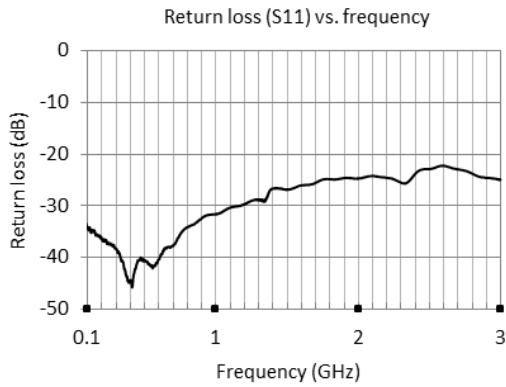
### Absolute maximum ratings

Operating temperature	0°C to 50°C
Storage temperature	-30°C to 70°C
DC voltage at RF input	50 V
Input power	+22 dBm

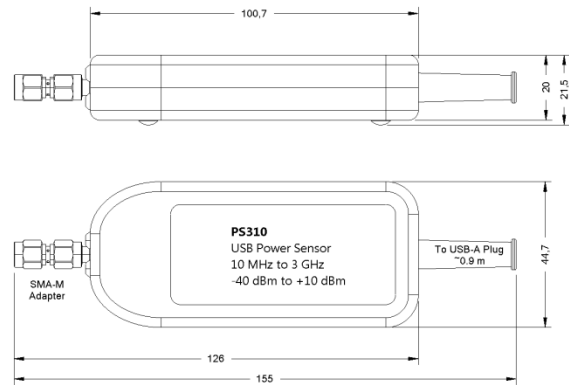
### Measurement specifications

Temperature coefficient		0.008 dB/K
S11 (SWR)	10 MHz to 1000 MHz	< 30 dB (1.1)
	1000 MHz to 3000 MHz	< 20 dB (1.2)
Accuracy		$\pm 0.1$ dB
Uncertainty		< 0.3 dB
Sampling rate		0.1 to 800 Sa/s

### Typical characteristics



### Outline drawings



Enclosure dimensions	100.7 x 44.7 x 20 mm
Weight	170 g
USB-A cable length	0.9 m

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