

PLS power meters

Features

- Operating frequency range from 50 MHz to 6/25.5/50 GHz
- Dynamic range from -50 dBm to +20 dBm
- Internal zeroing function, eliminates requirement for external calibration
- Measurement of modulated signals
- Power supply and control via USB 2.0 or USB 3.0



Description

The device is designed to measure microwave signal power between 50 MHz and 6/26.5/50 GHz. PLS power meters are used for manufacturing and monitoring of high-frequency and microwave devices, analyzing, tuning and testing microwave assemblies used in communications, instrument engineering and measuring equipment.

PLS provides the following main advantages:

- operation as a part of measuring systems;
- absolute and relative power measurement modes;
- displaying results in linear and logarithmic scales;
- display of pulse waveform (PLS06);
- Logging measured data in computer file.

Power meters are provided with connectors for external synchronization. SCPI-based text command system provides integration of the device with automated instrumentation systems.

Options

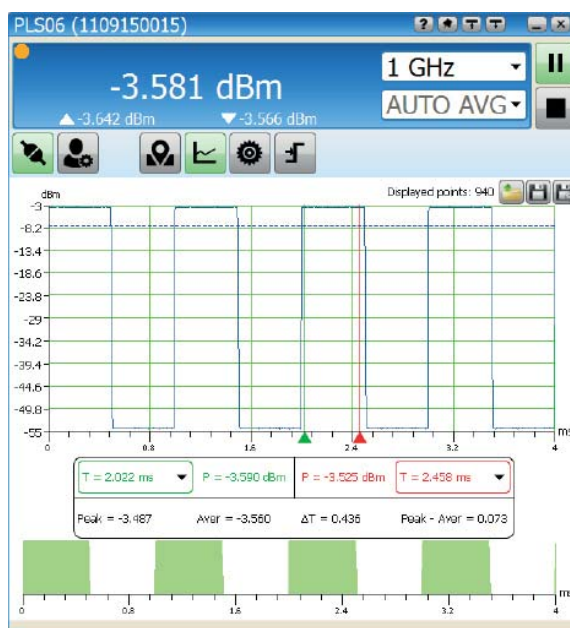
Coaxial adapters (PK option)

Depending on output microwave connector, PK2 coaxial adapter set will be added to basic PLS power meter kit to provide connection with devices of output microwave connector path or conversion for other type path.

Software

PLS-Client software is used to interact with the device.

- user-friendly interface;
- saving measurement data to file;
- setting of compensation for attenuation/amplification by external devices;
- graphic display of measurement data;
- signal-wave envelope display (in accumulation mode, available for PLS06);
- time markers to monitor signal power variations;
- saving/downloading profiles for measuring circuits;



Specifications

	PLS06	PLS26	PLS50
Operating frequency range	50 MHz ... 6 GHz	50 MHz ... 26.5 GHz	50 MHz ... 50 GHz
Power measurement range	-50 ... +20 dBm (10 nW ... 100 mW)		
Allowable measurement error	±10%	±7%	±7% (50 MHz ... 26.5 GHz) ±10% (26.5 ... 40 GHz) ±12% (40 ... 50 GHz)
Input VSWR, max	1.2		1.20 (50 MHz ... 26.5 GHz) 1.45 (26.5 ... 40 GHz) 1.80 (40 ... 50 GHz)
Wave impedance	50 Ohm		
Video band of meter, typical	100 kHz		
Measurement time			
Time required to establish operating mode, max.	5 sec		
Single measurement, max.	20 meas./sec		
On-line measurements (in accumulation mode), min.	12000 meas./sec	-	
Trigger			
Trigger input impedance	1 kOhm / 50 Ohm (variation in software)		
Logical zero level	< 1.5 V		
Logical one level	< 3.6 V		
Max. trigger output current	100 mA		
Connector types			
Microwave output	Type N, SMA (male or female)	3.5 mm (male), type IX, ver. 3 (male)	2.4 mm (male)
Trigger input/output	MCX, female		
Power and control	USB 2.0 Mini-B		
Operating temperature range	+5 ... +50 °C		
Dimensions (L × W × H)	125 × 65 × 25 mm	135 × 65 × 25 mm	
Weight	0.25 kg	0.35 kg	

Ordering information

Versions	
PLS06-11M	Type N input connector (male)
PLS06-11F	Type N input connector (female)
PLS06-12M	Type SMA input connector (male)
PLS06-12F	Type SMA input connector (female)
Supply set	
MCX-BNC cable assemblies	2 x 0.8 m each
Cable assembly USB 2.0 type-A — USB 2.0 Mini-B	Power and control cable assembly, 1.2 m, with screws on USB 2.0 Mini-B connector end
Supply set for ordering with PK option	
MCX-BNC cable assemblies	2 x 0.8 m each
Cable assembly USB 2.0 type-A — USB 2.0 Mini-B	Power and control cable assembly, 1.2 m, with screws on USB 2.0 Mini-B connector end
Torque wrench	KT-2 wrench with tightening torque of (0.9 ± 0.1) N-m and 8 mm size
PLS06-11M-PK	PK2-18-11R-11R
	PK2-18-11R-13
	PK2-18-11R-13R
PLS06-11F-PK	PK2-18-11-11
	PK2-18-11-13
	PK2-18-11-13R
PLS06-12M-PK	PK2-18-11-13R
	PK2-18-11R-13R
	PK2-20-13R-13R
PLS06-12F-PK	PK2-18-11-13
	PK2-18-11R-13
	PK2-20-13-13
Versions	
PLS26-13M	3.5 mm input connector (male)
PLS26-03M	Type IX, version 3 input connector (male)
Supply set	
MCX-BNC cable assemblies	2 x 0.8 m each
Cable assembly USB 2.0 type-A — USB 2.0 Mini-B	Power and control cable assembly, 1.2 m, with screws on USB 2.0 Mini-B connector end
Torque wrench	KT-2 wrench with tightening torque of (0.9 ± 0.1) N-m and 8 mm size
PLS26-13M	PK2-20-13R-13R
PLS26-03M	PK2-20-03R-03R

On your request, the device may be supplied with additional coaxial adapters and cable assemblies (Ref. Section 2. Microwave accessories).

Ordering example

- PLS06-11M power meter with PK option: PLS06-11M-PK – 1 pcs.
- PLS26-13M power meter – 1 pcs.
- 10 dB attenuator D2M-18-10-11R-11 – 1 pcs.