

SMCT

SWR METER AND CABLE TESTER

Applications

- ▶ Characterization of 1-port and 2-port RF networks
- ▶ On-site measurements
- ▶ Verification of electrical installations
- ▶ Suitable for tests in the GSM, GSM-R, GPS, UMTS, LTE and ISM bands

The SWR Meter and Cable Tester is a compact handheld product that performs 1-port (Return Loss & SWR, Cable Loss) and 2-port (Insertion Loss) measurements.

A large LCD display shows the revealed traces along with markers, thresholds and PASS/FAIL indicators. The measured data and the calibration files can be stored into the internal memory.

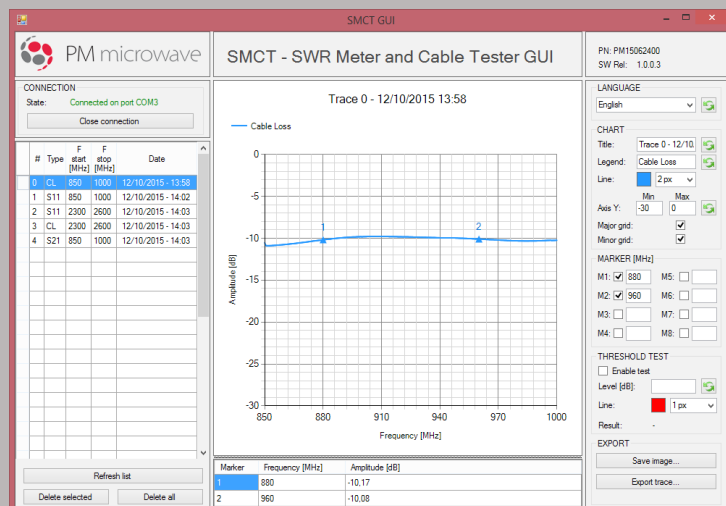
The SMCT represents the ideal solution for on-site measurements and verifications of electrical installations, for example on board of trains. It is suitable to test devices and systems in the GSM, GSM-R, GPS, UMTS, LTE and ISM bands.

The Cable Loss measure is intended for cables whose one end is not easily accessible; the Insertion Loss should instead be chosen when higher dynamic range or higher accuracy are preferable.

The device is powered with an internal Li-Ion battery. It is provided with a hard transit case that includes all the necessary accessories.

The given interface software (SMCT GUI) allows downloading data on a PC (through a USB connection), managing and analyzing it in detail, and exporting traces in numerical or graphical formats.

The SMCT GUI is able to automatically connect and download the measured files. Simple menus allow managing and displaying traces, showing markers and thresholds, and exporting data or images.



The hard transit case protects the SMCT and its accessories, i. e., the calibration kit, the battery charger, a USB cable and key (with SMCT GUI software).

TECHNICAL SPECIFICATIONS*

*specifications may be changed in accordance with the technical department

PORT 1

Return Loss (S11) dynamic range	0 ÷ -25 dB
Return Loss (S11) accuracy	±10%
Cable loss dynamic range	0 ÷ -12 dB
Cable loss accuracy	±10%

PORTS 1-2

Insertion Loss (S21) dynamic range	0 ÷ -50 dB
Insertion Loss (S21) accuracy	±0.5 dB typ.

SWEEP GENERATOR

Frequency range	100 ÷ 3000 MHz
Output RF level	-10 dBm typ.
Frequency stability	±2.5 ppm

GENERAL

No. of points	501
Frequency resolution	≤50 kHz
Local control	LCD display (128 x 64 pixel) with backlight + navigation keys

User functions

Internal memory

Remote control	
RF connectors	
Power supply	
Battery duration	
Operating temperature	
Storage temperature	
Storage relative humidity	
Dimensions	
Material	
Weight	
Protection degree	

HARD TRANSIT CASE

Dimensions	
Material	
Accessories included	
Protection degree	

Marker-to-frequency	
Thresholds with PASS/FAIL indicators	
Up to 30 measure files	
Up to 10 calibration files	
USB interface	
2 x N female 50 Ω	
Internal Li-Ion battery	
5 h min.	
-10 ÷ +45 °C	
-20 ÷ +80 °C	
10% ÷ 80%	
106 x 180 x 56 mm	
Aluminium	
0.9 kg	
IP40	

336 x 300 x 148 mm	
Polypropylene copolymer	
Calibration kit + battery charger + USB cable and key (SMCT GUI)	
IP67	