



PIM S1P - Portable PIM Analyzer

- Multiple Test Modes: Field Diagnostic, Analyzer with Multi PIM, PIM over Time, Rx Sweep, Single Carrier Mode for System Return Loss measurements, Distance to PIM, VSWR, Distance to Fault.
- Embedded DTP. No need to re-connect DUT when switching between PIM and DTP measurements.
- Variable output power 15 dBm to 44 dBm. Ideal for Macro BTS and DAS.
- Very high PIM sensitivity: -172 dBc @ 2x 43 dBm carriers.
- PIM vs. Time graph, Min & Maxhold feature. Perfect for static & dynamic PIM measurements.

AWT portable PIM S1P analyzers are powerful tools for analyzing telecommunication infrastructure. These PIM testers provide constant CW Power and with that, are in full conformance to PIM standard IEC 62037. The ruggedized analyzers are built to work under tough conditions and will perform reliably. PIM S1P testers offer variable output power from 15 dBm to 44 dBm. The market leading dynamic range and low receiver noise level makes them ideal for pinpointing and eliminating PIM at macro BTS sites and in-building DAS installations. Measurement results can be stored as PDF document, BMP screen shots, PDF protocol with embedded screen shot or as alphanumeric CSV files. Distance-to-PIM (DTP) measurements are accurate due to a patented technology. DTP is performed conveniently with the push of a button, no need to install external hardware and to re-connect the DUT.

Models

Model	Description	Tx Range (MHz)	Rx Range (MHz)
PP700L	LTE700 (low)	728 ~ 759	698 ~ 716
PP700U	LTE700 (high)	730 ~ 759	776 ~ 788
PP800	LTE800	791 ~ 821	832 ~ 862
PP850	AMPS/CDMA	869 ~ 896	824 ~ 851
PP900	GSM900	935 ~ 960	890 ~ 915
PP900E	E-GSM & GSM900	925 ~ 960	880 ~ 915
PP1800	DCS 1800 /GSM1800	1805 ~ 1880	1710 ~ 1785
PP1900	PCS1900	1930 ~ 1990	1850 ~ 1910
PP2000TD	TD-SCDMA(2000)	2010 ~ 2025	1900 ~ 1920
PP2100UMTS	UMTS/W-CDMA	2110 ~ 2170	1920 ~ 1980 / 2060
PP2100AWS	AWS	2110 ~ 2155	1710 ~ 1755
PP1921PA	PCS & AWS	1930 ~ 1990 / 2110 ~ 2155	1710 ~ 1755
PP2160JP	W-CDMA-JP	2150 ~ 2170	2110 ~ 2140
PPWBKR	WiBro-KR	2110 ~ 2170 / 2300 ~ 2390	1910 ~ 1990
PP2600LTE	IMT-E(2600), LTE2600	2620 ~ 2690	2500 ~ 2570

RF & Microwave Technology

AWT-Global provides advanced telecommunication technology products and analyzers for a variety of RF and Microwave applications.

Portable PIM Test Systems

Field use demands ruggedized yet accurate test instruments. Our portable PIM testers are designed exactly for these conditions. The wide Tx power range from 15dBm to 44dBm makes the PIM S1P analyzer ideal for Macro BTS sites and DAS installations. DTF (opt) can be measured with the push of a button.

PIM Analyzers for Production

Production analyzers have to perform permanently. AWT - Global offers single and dual band PIM analyzers that are built for 24/7 operation. Also available are expandable systems for up to four frequency bands.

Technical Specifications

System	
Measurement Method	Reverse (reflected) PIM, 3rd, 5th, 7th, 9th, 11th and 13th order
Residual PIM	< -129 dBm / -172 dBc
User Interface Ports	3x USB 1x LAN, 1x RF Output (7-16 DIN female)
Display	10.2 inch, touch screen

Transmitter	
Frequencies	See table
Frequency increments	100 kHz
Frequency accuracy	2 ppm
Power (per tone)	15 - 44 dBm adjustable (46 dBm opt)
Power Accuracy	+/- 0.35 dB
Reverse Pwr. Protection	+43 dBm for 5 sec

Receiver	
Measurement Range	-45 dBm to -132 dBm -88 dBc to -175 dBc
Noise Floor	<-138 dBm
Dynamic Range (typical)	96 dB (ref: -90 dBm)
Max Input Power	-10 dBm
Measurement Accuracy	+/- 2dB @ 2 x 43 dBm

Distance to PIM / Distance to VSWR (Opt)	
DTP / DTF resolution	0.1 m
DTP Accuracy	0.5 m (typ.)
DTF Accuracy	0.5 m (typ.)
Cable Types	Pre stored types & user can add new cable types

Electrical	
Main Power	100-240V, 50/60Hz
Power consumption	640 Watts (VA)

Dimensions / Weight	
Dimensions	457 x 305 x 500 (mm) 18.0 x 12.0 x 19.7 (inch)
Weight (freq > 1 GHz)	23 kg (24 kg)
PPOPT1	1kg

Environmental	
Operating Temperature	-10° C to +50° C
Storage Temperature	-20° C to +60° V
Ingress Protection	IP66 (lid closed) IP20 (lid open)
Relative humidity	5% to 90% (non condensing)
Mechanical shock rating	40G

Options & Accessories

Type	Description
PPOPT1	Embedded option for distance-to-PIM (DTP), Return Loss, VSWR and distance-to-fault
PPOPT5	Increases output power. Adjustable range from 20dBm to 46dBm
PACC2	Accessory Kit: low PIM cable 3m DIN(m)-DIN(m), low PIM cable 1m DIN(m)-DIN(m), low PIM Load 50W / 20W, dual port DIN(m)-DIN(f), PIM <-168dBc, torque wrench DIN7/16, (4) adaptors, cleaning tabs, carrying case IP66
PIMGEN	PIM generator, preset PIM value 95 dBm (+/-5) for quick system tests
PLOAD100	Low PIM load 100W, PIM < -168 dBc, 700-2700 MHz, with handle
PLOAD50	Low PIM load 50W / 20W (30 mins / permanent), PIM < -168 dBc, 700 - 2700 MHz, dual port DIN(m)-DIN(f), with ear for carabiner or strap
PCAB3M	Low PIM cable 3m, PIM < -168dBc, DIN(m)-DIN(m)
TRQWRN25	Torque Wrench 7/16 DIN - 25Nm / 19 ft lb

Product Quality

AWT is committed to providing our customers with products meeting the highest quality standards. All AWT products undergo thorough quality checks and are ISO 9001 and ISO 14001 certified.

For more information on any of our products or services please visit our Web site:

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