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 alphanumerical 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

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

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 build 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 (-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

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

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Specifications subject to change without further notification