PIM S1L Analyzer - TETRA & UHF

- Test Modes: Field Mode, Analyzer, multi PIM display, Rx sweep, PIM vs. Time, Single Carrier for insertion loss (IL) measurements.

- Embedded DTP option. Distance to PIM, VSWR, DTF.

- High PIM sensitivity: -165 dBc @ 2x 43 dBm carriers.

- Data recording: CSV, PDF, BMP screen shots.

- Output power adjustable: 2 x 15 dBm to 44 dBm.

- Large 10.2" Touch Screen Display

PIM S1L TETRA & UHF analyzers are important tools for analyzing telecommunication infrastructure, like antennas, cables and components. They are ideal for component testing in laboratory and quality assurance, but are also valuable field tools, providing vital test results in TETRA & UHF networks. Specifications and measurement accuracy are exceptional and of PIM S1L analyzers deliver reliable results. They are very easy to operate; just the touch of a button to start predefined tests.

Models

Model	Description	Tx Range (MHz)	Rx Range (MHz)
PS1L400 MK2	TETRA 400	390 ~ 400	380 ~ 385
PS1L400E MK2	E-TETRA	420 ~ 430	410 ~ 412
PS1L385 MK2	TETRA 385	385 ~ 400	410~ 425
PS1L450	Band 31, 450-470 Guard	460 ~ 470	450 ~ 455

Other TETRA & UHF frequency combinations can be provided. Contact AWT Global or your next customer representative for more information.

Our PIM S1L analyzers deliver constant CW Power signals during PIM measurements. This makes them fully conform to PIM specification IEC 62037, the standard for PIM testing. PIM S1L analyzers offer variable measurement signal output power from 15 dBm to 44 dBm. They provide even a Single-Carrier-Mode, ideal for Insertion Loss and coverage measurements.

Market leading dynamic range and low receiver noise level makes these analyzers perfect for testing, pinpointing and eliminating PIM. Results can be stored as PDF, BMP screen shots, or as CSV files. Our patented DTP measurement is highly accurate, and immediately available just at the push of a button.

"When public safety officers assign their staff to critical missions, they rely on the performance of their TETRA & UHF networks. Communication and data transmission must not experience any PIM distortion. PIM S1L MK2 TETRA & UHF helps to establish highest quality networks".

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

TETRA
TETRA (TErrestrial Trunked RAdio) has been designed to fulfill the requirements of users in Private Mobile Radio (PMR), Land Mobile Radio (LMR), Public-Access Mobile Radio (PAMR) and public safety and security applications such as police, border patrol and coast guard, fire departments and ambulances. This ETSI based standard is applied in most regions of the world.

PIM Analyzers -Types
AWT - Global offers a wide variety of PIM analyzers for many different applications. These include single, double, triple and quadruple band analyzers for standard frequencies and customized frequency bands.

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Technical Specifications

Transmitter

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

Receiver

Measurement Method:	Reverse (reflected) PIM IM 3rd, 5th, 7th, 11th, 13th, 15th ,17th order (up to 4 simultaneously)
Measurement Range	-45 dBm to - 122 dBm
	-88 dBc to -165 dBc
Noise Floor	<-132 dBm typ (@ 300 Hz)
Dynamic Range (typical)	96 dB (ref: -90 dBm)
Max Input Power	0 dBm
Measurement Accuracy	+/- 1.0 dB @ 2 x 43 dBm

Interfaces

RF Port	DIN 7/16 (f)
Internal Data Storage	SSD
Communication & External Data Storage	3x USB
LAN	Ethernet
Display	Touch Screen 10.2"

Distance to PIM / Distance to VSWR (Opt)

DTP / DTF resolution	0.1 m
DTP Accuracy	0.9 m (typ.)
DTF Accuracy	0.9 m (typ.)
Cable Types	Pre stored types & user can add new cable types

Electrical

Main Power	100 to 240V, 50 / 60Hz
Power Consumption	700 Watts (VA)

Dimensions / Weight

Dimensions	504 x 398 x 276 (mm) 19.8 x 15.7 x 10.9 (inch)
Weight / with POPT1	28.5 kg / 30.5 kg

Environmental

Operating Temperature	0° C to +40° C
Storage Temperature	-20° C to +60° C
Ingress Protection	IP20
Relative humidity	85% max (non condensing)
Mechanical shock rating	40G

Options & Accessories

Type	Description
POPT1	Embedded option for Distance-to-PIM (DTP), Return Loss, VSWR and Distance-to-Fault
PACC2L	Accessory Kit: low PIM cable 3m DIN(m)-DIN(m), low PIM Load 100W, PIM <-163dBc , 380-2800 MHz, torque wrench DIN7/16, (4) low PIM adaptors, cleaning tabs, hard carrying case IP66
PIMGEN	PIM generator, preset PIM value 80 dBm (+/-10) for quick system tests
PLOAD100L	Low PIM load 100W, PIM < -163 dBc, 380 - 2800 MHz, with handle
PLOAD50	Low PIM load 50W / 10W (30 mins / permanent), PIM < -165 dBc, 690 - 2800 MHz, -dual port DIN(m)-DIN(f), with ear for carabiner or strap
ADA-DMDF	Low PIM adapter, PIM < -165dBc, DIN(m)-DIN(f), Connector Saver
LIC308-DMDM-2M	Low PIM cable, Length: 2 meter (6 ft), PIM < -165dBc, DIN(m)-DIN(m)
LIC308-DMDM-1M	Low PIM cable, Length: 1 meter (3 ft), PIM < -165dBc, DIN(m)-DIN(m)

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Specifications subject to change without further notification