

PIM S1L MK2 Analyzer TETRA & UHF



modern engineering & design

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rfe-global
radio frequency equipment

Typical Application Areas:

- analyzing telecommunication infrastructures like antennas, cables and components
- component testing in quality assurance laboratories
- valuable field tool which provides vital test results in TETRA & UHF networks
- exceptional specifications, measurement accuracy and reliable results
- perfect for testing, pinpointing and eliminating PIM

Characteristics/Test Modes:

- field mode
- multi PIM display, Rx sweep, PIM vs. time
- single carrier for insertion loss measurements
- embedded DTP option
- distance to PIM, VSWR, DTF
- high PIM sensitivity (-165 dBc @ 2 x 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
- one-body solution
- variable measurement signal output power from 15 dBm to 44 dBm
- market leading dynamic range

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

Your Benefits:

- delivery of reliable results
- easy to operate (one button to start predefined tests)
- delivery of constant CW power signals during PIM measurements
- fully conform to PIM specification IEC 62037
- single-carrier-mode
- low receiver noise level
- helps to establish highest quality networks

Preliminary 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 power 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 type (@ 300 Hz)
Dynamic range (typical)	96 dB (ref. -90 dBm)
Max. output 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	3 x 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 & own added types
Power Supply	
Main power	100 to 240 V, 50/60 Hz
Power consumption	700 watts (VA)
Dimensions/Weight	
Dimensions	504 x 398 x 276 mm (W x L x H)
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	40 G

Options and Accessories:

Name	Description
POPT1	DTP (Distance to PIM)/VSWR/DTF (Distance to Fault) Option
PACC2	Accessory Kit: 1 low PIM cable 3 m (10 ft), low PIM load 50 W/10W (690 - 2800 MHz), 4 adapters, torque wrench with hard carry case
PACC2L	Accessory Kit: 1 low PIM cable 3 m/10 ft, low PIM 100 W (380 - 2800 MHz), 4 adapters, torque wrench with hard carry case
PIMGEN	PIM source: generator with preset PIM value of -80dBm (+/- 10). Quick indication of system functionality. Ideal for test and training.
PLOAD100L	PIM Load 100 W, PIM: < -165 dBc @ 2 x 43 dBm, 380 - 28000 MHz, DIN 7/16 (f)
PLOAD50	PIM Load: 50 W/10 W (30 min./permanent), PIM: < -165 dBc @ 2 x 43 dBm, 690 - 280 MHz, DIN 7/16 (f) – DIN 7/16 (m)
ADA-DMDF	low PIM adapter, PIM < -165 dBc @ 2 x 43 dBm, DIN (m) – DIN (f), connector saver
LIC308-DMDM-2M	low PIM cable 2 m (6 ft), PIM < -165 dBc @ 2 x 43 dBm, DIN (m) – DIN (m), metal protection collars
LIC308-DMDM-1M	low PIM cable 1 m (3 ft), PIM < -165 dBc @ 2 x 43 dBm, DIN (m) – DIN (m), metal protection collars



The manufacturer reserves the right to implement technical changes.

Manufacturer:



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