iMT Series

Portable Passive Intermodulation Analyzer

Passive Intermodulation (PIM) Analyzer

The iMT series Passive Intermodulation (PIM) analyzer is an economical, high power PIM test solution. This rugged, simple to operate design enables network operators to improve site performance by finding and eliminating sources of passive intermodulation at the cell site.

SUMMITEK ADVANTAGE

PRODUCT FEATURES

- Rugged, reliable construction suitable for field use
- Integrated polycarbonate transit case
- Simple LED user interface
- Fixed frequencies, powers and IM product
- Integrated return loss measurement
- PC interface for report generation

TECHNICAL SPECIFICATIONS |

SYSTEM

Measurement method	Reverse (reflected) PIM, 3rd order
Residual PIM	< -107dBm/-150dBc max (-115dBm/-158dBc typ.)
Return loss range	-1 to -20dB
Return loss accuracy	± 2dB (± 1dB typ.)
User interface ports	1x USB 1x RF output (7-16 DIN female)
Display	LED's indicate PIM, power or return loss

TRANSMITTER

Transmit frequencies	See model table
Frequency accuracy	± 5ppm (max), aging ± 1ppm (max) after first year
Power per tone (fixed)	2x 20W (+43dBm)
Power accuracy (per tone)	± 0.5dB (max)

TECHNICAL SPECIFICATIONS CONTINUED |

RECEIVER

Receive frequency	See model table
Measurement noise floor	< -120dBm
Measurement range	-60dBm to -107.5dBm (-60dBm to -120dBm with laptop interface software)

ELECTRICAL

Mains power	110-230V, 50/60Hz AC
Power consumption	< 200W

MECHANICAL

Dimensions	22 x 14 x 9in (550 x 350 x 230mm)
Weight	< 43lbs (18.7kg)
Cooling	Forced air

ENVIRONMENTAL

Operating temperature range	0˚C to +55˚C
Storage temperature range	-10˚C to +60˚C
Ingress protection (IP)	IP20 (with lid open) IP63 (with lid closed)
Relative humidity	5% to 95% RH non-condensing

MODELS |

	DESCRIPTION	TX FREQUENCY 1	TX FREQUENCY 2	RX FREQUENCY (PIM)
iMT-0850B	850MHz	891.5MHz	869.0MHz	846.5MHz
iMT-0851B	CDMA800	869.0MHz	894.0MHz	844.0MHz
iMT-0852B	CDMA850	874.5MHz	900.1MHz	848.99MHz
iMT-0900B	GSM900	960.0MHz	935.0MHz	910.0MHz
iMT-1000B	CDMA850/GSM900	935.3MHz	884.7MHz	834.1MHz

Self contained, ruggedized transport case.

WARNING: Use of the portable PIM analyzer in a radiating mode, for example when connected to an antenna not enclosed in an anechoic environment, may be a violation of licensing regulations. Users should have permission in advance, from any licensed operators that might be affected by these tests. Furthermore, radiating high RF power can pose a personnel risk.

Specifications subject to change without notice.