PIM Master™ Specifications

General Specifications

All specifications and characteristics apply under the following conditions, unless otherwise stated: 1) After 5 minutes of warm-up time, where the instrument is left in the ON state; 2) All specifications apply when using internal reference; 3) All specifications subject to change without notice; 4) Typical performance is the measured performance of an average unit; 5) Recommended calibration cycle is 12 months.

Measurements	
PIM	3rd, 5th, and 7th order intermodulation product in receive band (user selectable)
Noise Floor	Rx noise floor of base station
Distance-to-PIM	Distance and magnitude of multiple PIM sources (Option 0420)
Instrument Setup Parameters	
Instruments Supported	Site Master™ S332E, S362E, Spectrum Master™ MS2712E, MS2713E, Cell Master™ MT8212E, MT8213E, BTS Master™ MT8221B, MT8222A
Frequency	Carrier F1, Carrier F2, Intermod Order (3rd, 5th, 7th), Span
Amplitude	Ref Value, Scale, Ref Level Offset, Auto Range (On/Off), Amplitude Tone (On/Off)
Setup	Output Power, Test Duration (1 to 60 s), Normal → A, Max Hold → A, Display Type (Trace, Bar)
Parameter Setup	F1, F2, Power
Limit Lines	Limit (Upper/Lower), On/Off, Limit Move, Limit Alarm (On/Off)
GPS	On/Off, 3.3/5.0 V
DTP	Cable Velocity, Distance, Calibrate
Measurements	PIM Test (Measure/Off) Measure Noise Floor, Save Measurement
PIM Measurement Ranges	
RF Test Power	Two CW tones of 20, 30, or 40 Watts (≈ 43, 45, 46 dBm) (user selectable)
Transmit Frequency Range	1930 to 1990 MHz, 2110 to 2155 MHz
3rd, 5th, and 7th Order Frequency Ranges	1710 to 1755 MHz, 1850 to 1910 MHz
Residual PIM Performance	< −112 dBm/−155 dBc typical
Measurable PIM order	3rd, 5th, and 7th order intermodulation product (if in band)
Distance-to-PIM	Distance and magnitude of multiple PIM sources
PIM Master Connectors	
Test Port	7/16 DIN, female, 50 Ω
RF Out	Type N, female, 50 Ω (connect to RF In on instrument)
10 MHz Out	BNC, female, 50 Ω, 10 MHz (connect to Ext. Ref. In on instrument)
USB Interface	Type B (connect to USB Type A port on instrument)
AC Power	IEC60320 C14
Power	
Emergency Stop	Red push button
AC Power	90-240 VAC, 50/60 Hz
Electromagnetic Compatibility	
European Union	CE Mark, EMC Directive 2004/108/EC
Australia and New Zealand	C-tick N274
Interference	EN 61326-1:2006
Emissions	EN 55011:2007
Immunity	EN 61000-4-2/-3/-4-4/-4-5/-4-6/-4-11
Safety	
Safety Class	2006/95/EC, EN 61010-1 Class 1
Product Safety	IEC 60950-1 when used with Company supplied Power cable
Environmental	
Operating Temperature	−10 °C to 55 °C
Maximum Humidity	95%
Shock	MIL-PRF-28800F Class 2
Storage	−51 °C to 71 °C
Altitude	4600 meters, operating and non-operating
Size and Weight	
Size	300 mm x 425 mm x 500 mm (12 in x 17 in x 20 in)
Weight	28.6 kg (63 lbs)