

PIM & S-Parameters Fast Test system for Antennas

PIM & S-Parameters test system (FST) for Smart Antenna and TD multi-port antenna and TD multi-port antenna is developed for TD smart antenna PIM test. The product is applied to multi-band and multi-port smart antenna intermodulation index and S-parameters fast test. The product has two test models including "Production Model" and "Engineering Model" (dot frequency, sweep frequency, time domain), which make user observe and analyze results of test more convenient, fast and accurately.

PRODUCT FEATURES

- PIM and S-Parameters-testing
- High integration density, no need to build complicated platform
- Insertion loss compensation function guarantees testing accuracy
- Analyzed result can be exported in reporting format of Microsoft Word/Excel/PDF
- Data generated can be exported to Micro Soft Access format
- Easy to operate
- Bar code scanning and printing(option)
- Overcurrent and overvoltage protecting
- Open circuit / short circuit warning

TECHNICAL SPECIFICATION

SYSTEM

Measurement Method	Reflect PIM
Measureable PIM order	IM3/IM5/IM7
Reflect residual PIM	$<-165\text{dBc}@2\times+43\text{dBm}$
Test port	9×DIN type Female
User Interface	4 x USB, 1 x LAN

Display	19"LCD Interface screen
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Transmit

Frequency Stepping	200KHz/500KHz/1MHz/2MHz/5MHz
Power Accuracy	±3ppm
Single carrier power	2×1 to 25W(+30 to +44dBm)
Power stepping	0.5dB
Power Stability	±0.5dB
Over Temperature Protection	≥70℃
Reverse Power Protection	100W

Recevier

Measurement Noise Floor	≤-138dBm
Measurement Range	-55 to -138dBm
Receive Accuracy	≤±0.5@-100dBm

Power

Mains Power	AC175-250V,50Hz
Power Consumption	450W (Max)
Warm Up Time	3 Minutes

Mechanics

Size	Case1: 5U 470x220x500mm (LxWxH)
	Case2: 7U 470x310x500mm (LxWxH)
	Case3: 3U 470x132x500mm (LxWxH)
Weight	Approx 150Kg

Environments

Operating Temperature Range	-5 ℃ to +35 ℃
Protection Level	Indoor Use

Relative humidity

5% to 90% RH no-condensing

MODELS

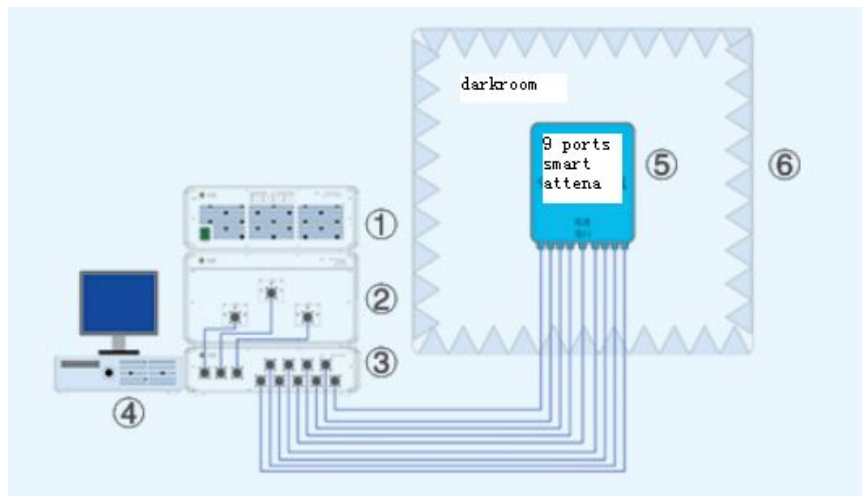
System		TX RANGE	RX RANGE
PIM1900S-F	F frequency band	1880-1900MHz	1915-1920MHz(sweep frequency/dot frequency)
PIM2100S-A	A frequency band	2017.5-2025MHz	2010MHz(dot frequency)
PIM2600S-D	D frequency band	2627.5-2635MHz	2620MHz(dot frequency)

*Customized

RF SWICTH BOX

Frequency Range	0.7~2.7GHz
Input Port	3xDIN(Female)
Output Port	9xDIN(Female)
Reflect PIM	-160dBc@x+43dBm
SWR	≤1.2
Insertion Loss	≤80dB
Input Power(Max)	100W
Control Method	Serial Port
Mains Power	AC 220V,0.5A

Sketches



- ① RF Active Cabinet (5U)
- ② RF Passive Cabinet(7U)
- ③ RF Switch Case (3U)
- ④ Controlling Computer
- ⑤ Tested Antenna
- ⑥ Electromagnetic shielding