IBA SERIES

BENCH TOP PIM ANALYZERS

The iBA Series PIM Analyzer is a complete bench top and rack mounting PIM test solution used with a system controller* and intuitive user software. This economical solution comes in model variations that cover all major commercial wireless bands. The iBA base model (A-Series) measures Reverse/reflected IM only. The B-Series adds a second test port to support a Reverse IM measurement on either port and a forward IM measurement port-to-port. Both the A & B Series can be fitted with optional internal DC/AISG Bias Tee.

FEATURES

- Fully integrated system in compact size
- Fully configurable frequencies, power and IM products
- USB control interface
- Frequency sweep and time trace modes
- Range to Fault (RTF) optional accessory, allows users to measure distance to Return Loss and PIM Fault
- Optional internal DC / AISG Bias-Tee
- Compatible with ACE calibration tool

TECHNICAL SPECIFICATIONS

SYSTEM	
Measurement method	A-Series: Reverse (Reflected) PIM | B-Series: Port 1 Reverse; Port 2 Reverse; Port-to-Port Forward PIM
Residual PIM	< -125dBm (@2x43dBm) iBA-2600A & B < -125dBm / over 90% of the band (@2x43dBm)
IM order	3rd, 5th, 7th, 9th and 11th order
User interface ports	1 x USB Type B, 1 x USB Type A, 1x Monitor Port (N Female). Bias-Tee Option: 1 x AISG / DC on 8 Pin DIN Female
Test ports	A-Series: 1 x RF Output (7-16 DIN Female); B-Series: 2 x RF Output (7-16 DIN Female)

TRANSMITTER	
Transmit frequencies	Refer to iBA series model table
Frequency increment	100kHz
Frequency accuracy	± 5ppm maximum, aging ± 1ppm maximum after first year
Power per tone (adjustable)	+20 to +44dBm | 0.1W to 25W (Effective June 28, 2018) +30 to +44dBm | 1W to 25W (Units manufactured before June 28, 2018)
Power accuracy (per tone)	± 0.35dB

RECEIVER	
Receive band (100kHz steps)	Refer to iBA Series Model Table
Measurement noise floor	< -130 dBm (-135 dBm, typical)
Measurement range	-55dBm to -130dBm

AISG/DC OPTION	
Factory Fitted AISG Modem and Bias Tee	AISG ON/OFF keying AND/OR +28V DC available on the RF Test port (on Port 1 for the B Series iBA) AISG baseband (RS485) AND/OR +28V DC is available on the 8 pin DIN Female connector
AISG/DC Specifications: (DC specs applies to both ports)	Output Voltage: +28V max Current: 2.5A max Frequency: 2.076 to 2.276 MHz Return loss: >10dB
Ordering Information	Add Suffix -1 to model number Eg iBA-1800A-1 or iBA-1800B-1 to include the AISG/DC Option

ELECTRICAL	
Mains power	115 - 230V, 50 - 60Hz AC
Power consumption	800W

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MECHANICAL	
Dimensions H x D x W	A series- 175.3 x 508 x 482.6mm | 6.9 x 20 x 19in B series- 264.2 x 508 x 482.6mm | 10.4 x 20 x 19in
Weight	A series- 22.7kg | 50lbs B series- 30kg | 66lbs
Cooling	Forced air (100mm gap to be maintained at the rear when rack mounted, 1U spacing recommended between units)

ENVIRONMENTAL	
Temperature range	+10ºC to +40ºC | +50°F to +104°F (operating)
Ingress protection	Indoor use (or similar protected outdoor environment)
Operational humidity	5% to 90% non-condensing
Storage temperature range	-20°C to +60°C | -4°F to +140°F

IBA A-SERIES MODELS

Reverse IM only				
MODEL	TX RANGE	RX RANGE (PIM)	IM ORDER	RTF MODULE
iBA-0700LA	728-746MHz	698-716MHz	3rd, 5th, 7th, 9th, 11th	RTF-1000
iBA-0700HA	728-757MHz	776-787MHz	3rd, 5th, 7th, 9th, 11th	RTF-1000
iBA-0703A	758-803MHz	703-748MHz	3rd, 5th, 7th, 9th, 11th	RTF-1000
iBA-0790A	791-821MHz	832-862MHz	3rd, 5th, 7th, 9th, 11th	RTF-1000
iBA-0850A	869-894MHz	824-849MHz	3rd, 5th, 7th, 9th, 11th	RTF-1000
iBA-0901A	925-960MHz	880-915MHz	3rd, 5th, 7th, 9th, 11th	RTF-1000
iBA-1800A	1805-1880MHz	1710-1785MHz	3rd, 5th, 7th, 9th, 11th	RTF-2000
iBA-1921A	1930-1990MHz / 2110-2155MHz	1710-1755MHz / 1850-1910MHz	3rd, 5th, 7th, 9th, 11th	RTF-2000
iBA-2101A	2110-2170MHz	1920-2080MHz	3rd, 5th, 7th, 9th, 11th	RTF-2000
iBA-2600A	2620-2690MHz	2500-2570MHz	3rd, 5th, 7th, 9th, 11th	RTF-2600

IBA B-SERIES MODELS

Reverse IM on port 1 and port 2, Forward IM on port 1 to port 2				
MODEL	TX RANGE	RX RANGE (PIM)	IM ORDER	RTF MODULE
iBA-0700LB	728-746MHz	698-716MHz	3rd, 5th, 7th, 9th, 11th	RTF-1000
iBA-0700HB	728-757MHz	776-787MHz	3rd, 5th, 7th, 9th, 11th	RTF-1000
iBA-0703B	758-803MHz	703-748MHz	3rd, 5th, 7th, 9th, 11th	RTF-1000
iBA-0790B	791-821MHz	832-862MHz	3rd, 5th, 7th, 9th, 11th	RTF-1000
iBA-0850B	869-894MHz	824-849MHz	3rd, 5th, 7th, 9th, 11th	RTF-1000
iBA-0901B	925-960MHz	880-915MHz	3rd, 5th, 7th, 9th, 11th	RTF-1000
iBA-1800B	1805-1880MHz	1710-1785MHz	3rd, 5th, 7th, 9th, 11th	RTF-2000
iBA-1921B	1930-1990MHz / 2110-2155MHz	1710-1755MHz / 1850-1910MHz	3rd, 5th, 7th, 9th, 11th	RTF-2000
iBA-2101B	2110-2170MHz	1920-2080MHz	3rd, 5th, 7th, 9th, 11th	RTF-2000
iBA-2600B	2620-2690MHz	2500-2570MHz	3rd, 5th, 7th, 9th, 11th	RTF-2600

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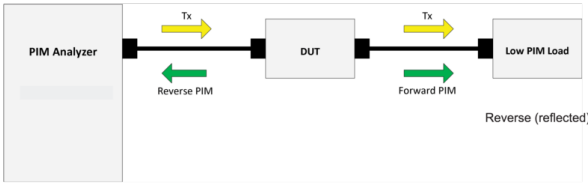
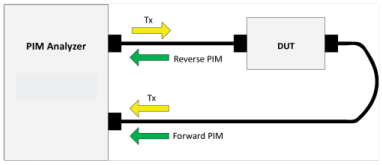
C-Series: Reverse Only



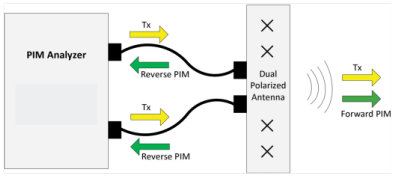
Reverse (reflected) PIM only.

D-Series: Adds Forward / Through test capability



Measure the PIM propagating in the same direction as the test signals in addition to Reverse PIM.

D-Series: Adds a second Reverse test port



Measure Reverse PIM on two ports; A time-saver when testing dual polarized antennas.

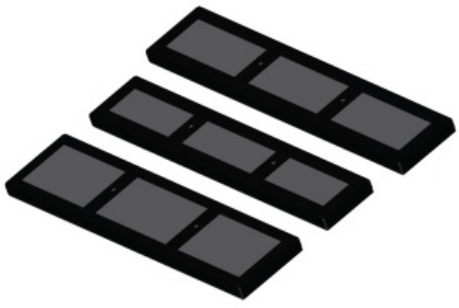
ACCESSORIES

ORDERING INFORMATION	
ACE-1000A **Highly recommended accessory**	PIM Instrument self-calibration tool
RTF	Range To Fault PIM and Return Loss fault location tool
PIL-0006A	Low Passive Intermodulation Termination 610MHz - 2700MHz
R92-0724	Air filter kit - iBA A Series
R92-0725	Air filter kit - iBA B Series

PIM Instrument self-calibration tool

RTF - PIM and Return Loss fault location tool

PIL-0006A



Air filter kit

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