

IBA SERIES 40W

BENCH TOP PIM ANALYZERS

The iBA Series 40W 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 (C-Series) measures Reverse/reflected IM only. The D-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 C & D 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
- +46dBm Output Power (Max)
- Compatible with ACE calibration tool

TECHNICAL SPECIFICATIONS

SYSTEM	
Measurement method	C-Series: Reverse (Reflected) PIM D-Series: Port 1 Reverse; Port 2 Reverse; Port-to-Port Forward PIM
Residual PIM	< -125dBm (@2x43dBm)
IM order	3rd, 5th and 7th Order
User interface ports	1 x USB Type B, 1 x USB Type A, 1 x Monitor Port (N Female), Bias-Tee Option: 1 x AISG / DC on 8 Pin DIN Female
Test ports	C-Series: 1 x RF Output (7-16 DIN Female); D-Series: 2 x RF Output (7-16 DIN Female)
TRANSMITTER	
Transmit frequencies	Refer to iBA series 40W model table
Frequency increment	100kHz
Frequency accuracy	± 5ppm maximum, aging ± 1ppm maximum after first year
Power per tone (adjustable)	+30 to +46dBm 1W to 40W
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 D 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
ELECTRICAL	
Mains power	115 - 230V, 50 - 60Hz AC
Power consumption	700W (Maximum)

MECHANICAL	
Dimensions H x D x W	C series- 264.2 x 508 x 482.6mm 10.4 x 20 x 19in D series- 355.3 x 508 x 482.6mm 14 x 20 x 19in
Weight	C series- 22.7kg 50lbs D series- 31.3kg 69lbs
Cooling	Forced air (100mm gap to be maintained at the rear when rack mounted, 1U spacing recommended between units)
ENVIRONMENTAL	
Temperature range	+10°C to +40°C +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

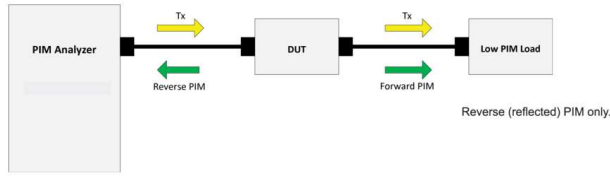
IBA C-SERIES MODELS

C-SERIES(Single port) Reverse IM				
MODEL	TX RANGE	RX RANGE (PIM)	IM ORDER	RTF MODULE
iBA-0600C	TX1 617-630MHz TX2 640-652MHz	663-698MHz	IM3, IM5, IM7	RTF-1000
iBA-0703C	TX1 758-768MHz TX2 778-803MHz	703-748MHz	IM3, IM5, IM7	RTF-1000
iBA-0707C	TX1 728-731.5MHz TX2 741-764MHz	Rx Low 698-716MHz Rx High 776-802MHz	IM3, IM5, IM7	RTF-1000
iBA-0850C	TX1 869MHz TX2 879-894MHz	824-849MHz	IM3, IM5, IM7	RTF-1000
iBA-0901C	TX1 925-935MHz TX2 945-960MHz	880-915MHz	IM3, IM5, IM7	RTF-1000
iBA-1800C	TX1 1805-1812MHz TX2 1825-1880MHz	1710-1785MHz	IM3, IM5, IM7	RTF-2000
iBA-1921C	PCS TX1 1930-1950MHz TX2 1970-1990MHz AWS TX1 1930-1950MHz TX2 2110-2155MHz	PCS 1850-1910MHz AWS 1710-1755MHz	IM3, IM5, IM7	RTF-2000
iBA-2101C	TX1 2110-2130MHz TX2 2150-2170MHz	1920-2080MHz	IM3, IM5, IM7	RTF-2000
iBA-2600C	TX1 2620-2630MHz TX2 2650-2690MHz	2500-2570MHz	IM3, IM5, IM7	RTF-2600

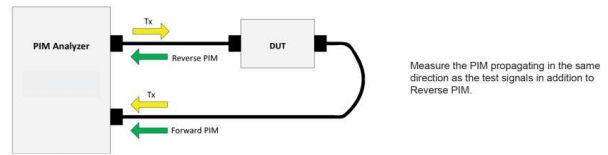
IBA D-SERIES MODELS

D-SERIES(Dual Port) Forward and Reverse IM on ports 1 and 2				
MODEL	TX RANGE	RX RANGE (PIM)	IM ORDER	RTF MODULE
iBA-0600D	TX1 617-630MHz TX2 640-652MHz	663-698MHz	IM3, IM5, IM7	RTF-1000
iBA-0703D	TX1 758-768MHz TX2 778-803MHz	703-748MHz	IM3, IM5, IM7	RTF-1000
iBA-0707D	TX1 728-731.5MHz TX2 741-764MHz	Rx Low 698-716MHz Rx High 776-802MHz	IM3, IM5, IM7	RTF-1000
iBA-0850D	TX1 869MHz TX2 879-894MHz	824-849MHz	IM3, IM5, IM7	RTF-1000
iBA-0901D	TX1 925-935MHz TX2 945-960MHz	880-915MHz	IM3, IM5, IM7	RTF-1000
iBA-1800D	TX1 1805-1812MHz TX2 1825-1880MHz	1710-1785MHz	IM3, IM5, IM7	RTF-2000
iBA-1921D	PCS TX1 1930-1950MHz TX2 1970-1990MHz AWS TX1 1930-1950MHz TX2 2110-2155MHz	PCS 1850-1910MHz AWS 1710-1755MHz	IM3, IM5, IM7	RTF-2000
iBA-2101D	TX1 2110-2130MHz TX2 2150-2170MHz	1920-2080MHz	IM3, IM5, IM7	RTF-2000
iBA-2600D	TX1 2620-2630MHz TX2 2650-2690MHz	2500-2570MHz	IM3, IM5, IM7	RTF-2600

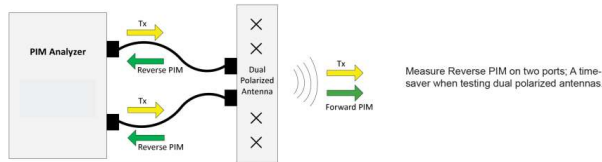
C-Series: Reverse Only



D-Series: Adds Forward / Through test capability



D-Series: Adds a second Reverse test port



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
R92-0725		Air filter kit - iBA C Series
R92-0726		Air filter kit - iBA D Series



PIM Instrument self-calibration tool



RTF - PIM and Return Loss fault location tool



PIL-0006A



Air filter kit