

# iQA Series

## Passive Intermodulation Analyzer



Passive Intermodulation (PIM) Analyzer

Summitek Instruments' iQA series Passive Intermodulation (PIM) analyzer is a feature rich, high power PIM test solution. This field proven analyzer enables network operators to improve site performance by finding and eliminating sources of passive intermodulation at the cell site. The design includes an integrated panel PC with intuitive touch screen interface for performing tests and generating site reports.

### Features

- Rugged, reliable construction suitable for field use
- Fully configurable frequencies, powers and IM Product
- Integrated polycarbonate transit case
- Threshold alarm
- Simple to operate touch screen interface
- Internal report generation



## Technical Specifications

### System

Measurement Method	Reverse (reflected) PIM , 3rd, 5th , 7th and 9th order		
Residual PIM	< -110 dBm/-153dBc max (<-115 dBm/-158dBc typ.)		
User Interface Ports	2x USB, x1 LAN	1x RF Output (7-16 DIN female)	1x Monitor Port (Type-N female)
Display	8.4 in (213 mm) touch screen display		

### Transmitter

Transmit Frequencies	See model table
Frequency Increment	50 kHz
Frequency Accuracy	± 5 ppm (max), aging ± 1 ppm (max) after first year
Power Per Tone (adjustable)	2x 2 to 20W (+33 to +43dBm)
Power Accuracy (per tone)	± 0.5 dB (max)

### Receiver

Receive Band (50kHz steps)	See model table
Measurement Noise Floor	< -128 dBm
Measurement Range	-50 dBm to -128 dBm

## Technical Specifications (cont.)

### Electrical

Mains Power	115-230V, 50/60Hz AC
Power Consumption	650 W

### Mechanical

Dimensions	19 x 18 x 12 in (500 x 457 x 305mm)
Weight	< 50 lbs (22.7kg)
Cooling	Forced Air

### Environmental

Operating Temperature Range	-10°C to +40°C
Storage Temperature Range	-20°C to +60°C
Ingress Protection (IP)	IP20 (with lid open) IP21 (with lid closed)
Relative Humidity	5% to 95% RH non-condensing
Mechanical shock	40G shock rating

## Models

	Description	TX Range	RX Range (PIM)
iQA-850A	850 MHz	869-894 MHz	824-849 MHz
iQA-900A	GSM900	935-960 MHz	890-915 MHz
iQA-1800A	DCS1800	1805-1880 MHz	1710-1785 MHz
iQA-1900A	PCS1900	1930-1990 MHz	1850-1910 MHz
iQA-1921A	Dual Band PCS/AWS	1930-1990 MHz/ 2110-2155 MHz	1710-1755 MHz/ 1850-1910 MHz
iQA-2100A	UMTS (special band)	2110-2170 MHz	2050-2090 MHz



Vertical orientation for easy access to user interface.



Self contained, ruggedized transport case.



WARNING: Use of the portable PIM test units 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.