

iQA Series

Portable Passive Intermodulation Analyzer



Passive Intermodulation (PIM) Analyzer

The 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.



PRODUCT FEATURES

- Rugged, reliable construction suitable for field use
- Fully configurable frequencies, powers and IM product
- Integrated polycarbonate transit case
- Spectrum analyzer mode
- 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 | < -115dBm/-158dBc max (<-125dBm/-168dBc typ.) |
| User interface ports | 2x USB, x1 LAN 1x RF output (7-16 DIN female) |
| Display | 8.4in (213mm) touch screen display |

TRANSMITTER

| | |
|-----------------------------|---|
| Transmit frequencies | See model table |
| Frequency increment | 50 kHz |
| Frequency accuracy | ± 5ppm (max), aging ± 1ppm (max) after first year |
| Power per tone (adjustable) | 2x 2 to 20W (+33 to +43dBm) |
| Power accuracy (per tone) | ± 0.5dB (max) |

RECEIVER

| | |
|----------------------------|-------------------|
| Receive band (50kHz steps) | See model table |
| Measurement noise floor | < -128dBm |
| Measurement range | -50dBm to -128dBm |

TECHNICAL SPECIFICATIONS CONTINUED |

ELECTRICAL

| | |
|-------------------|----------------------|
| Mains power | 115-230V, 50/60Hz AC |
| Power consumption | 650W |

MECHANICAL

| | |
|------------|------------------------------------|
| Dimensions | 19 x 18 x 12in (500 x 457 x 305mm) |
| Weight | < 50lbs (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-700LB | 700MHz (low) | 728-746MHz | 698-716MHz |
| iQA-700HB | 700MHz (high) | 728-757MHz | 776-787MHz |
| iQA-850B | 850MHz | 869-894MHz | 824-849MHz |
| iQA-900B | GSM900 | 935-960MHz | 890-915MHz |
| iQA-0901B | EGSM 900 | 925-960MHz | 880-915MHz |
| iQA-1800B | DCS1800 | 1805-1880MHz | 1710-1785MHz |
| iQA-1921B | Dual band PCS/AWS | 1930-1990MHz/2110-2155MHz | 1710-1755MHz/1850-1910MHz |
| iQA-2101B | UMTS (3rd & 7th order) | 2110-2170MHz | 1920-2080MHz |



Vertical orientation for easy access to user interface.



Self contained, ruggedized transport case.

WARNING: Use of the portable PIM analyzer 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.