

ITA SERIES

BATTERY PORTABLE TWINBAND PASSIVE INTERMODULATION ANALYZER

The iTA Series Passive Intermodulation (PIM) analyzer is the first multi-band battery powered PIM Test Analyzer versatile enough to support multiple test scenarios such as testing at the top of the tower, base of tower, roof top and in-building for DAS systems. This IEC compliant 20W, rugged, battery operated design includes a tablet computer in a ruggedized case for remote control. This allows hands-free dynamic testing that is safe and convenient. Add the optional Range to Fault (RTF) module to quickly identify the location of PIM and Return Loss sources. Evolved from a design legacy of field proven analyzers, this PIM Analyzer enables network operators to improve site performance by finding and eliminating sources of passive intermodulation at the cell site. An intuitive touch screen interface is also available for local control, performing tests and quickly generating site reports.



FEATURES

- Multi cellular band testing in one instrument.
- Fully configurable frequencies, powers and IM products
- 7 inch tablet computer included for remote control of device
- Simple to operate touch screen interface
- Extensive combined band reporting capabilities
- Spectrum monitor, frequency sweep and time trace modes
- RTF compatible
- Battery powered

TECHNICAL SPECIFICATIONS

| SYSTEM | |
|-----------------------------|--|
| Measurement method | Reverse (reflected) PIM, 3rd & 5th order. (7th & 9th order in applicable bands) |
| Residual PIM | < -117dBm/-160dBc maximum (<-125dBm/-168dBc typical) |
| Interface ports | 2x RF output (7-16 DIN female), 1x USB 2.0 Host, 1x USB 2.0 Slave, 1x SD 2x monitor port (SMB female), 1x SMA-RP (Wi-Fi external antenna) |
| User interface | Local - touch screen display 4.3in (109mm) Remote - tablet computer (included), any Wi-Fi enabled user device with web browser |
| Return loss alarm | Automatic detection and shut down when high RL is detected |
| TRANSMITTER | |
| Transmit frequencies | See model table |
| Frequency increment | 100kHz |
| Frequency accuracy | ± 5ppm maximum, aging ± 1ppm maximum after first year |
| Power per tone (adjustable) | 0.1 to 20W (+20 to +43dBm in 1dB increments) |
| Power accuracy (per tone) | ± 0.5dB maximum |
| RECEIVER | |
| Receive band (100kHz steps) | See model table |
| Measurement noise floor | < -128dBm |
| Measurement range | -50dBm to -128dBm |
| ELECTRICAL | |
| Battery power | 25.9 VDC, 2600 mAh, 67Wh Lithium Ion battery pack (removable) |
| Battery operating time | Depends on usage, 2 hr minimum per battery pack |
| Battery charger | Output: 29.4 VDC, 1.2 Amp |

| MECHANICAL | |
|---------------------------|--|
| Dimensions H x D x W | 310 x 369 x 250mm 12.2 x 14.5 x 9.8in |
| Weight | 22.3kg 49.2lbs |
| ENVIRONMENTAL | |
| Temperature range | -10°C to +45°C +14°F to +113°F (operational) |
| Ingress protection | IP54. IP67 when enclosed in optional hard case |
| Operational humidity | 5% to 95% RH non-condensing |
| Storage temperature range | -10°C to +60°C +14°F to +140°F |
| Mechanical shock | 40G shock rating |

ORDERING INFORMATION

| MODELS | | | | | |
|---|----------------------------------|--|--|---|------------------------|
| Note: Unique Kaelus iTA models can be purchased based on any iPA model pairs. Contact your local Kaelus Sales representative. | | | | | |
| | DESCRIPTION | TX1 RANGE | TX2 RANGE | RX RANGE (PIM) | RTF MODULE * |
| iTA-7991A | LTE 800 GSM 900 | 791-796MHz 932.5-937.5MHz | 808-821MHz 949-960MHz | 832-862MHz 903-915MHz | RTF-1000A |
| iTA-0818A | 850MHz DCS1800 | 869MHz 1805-1812MHz | 879-894MHz 1825-1880MHz | 824-849MHz 1710-1785MHz | RTF-1000A RTF-2000A |
| iTA-9118A | EGSM900 DCS1800 | 925-935MHz 1805-1812MHz | 945-960MHz 1825-1880MHz | 880-915MHz 1710-1785MHz | RTF-1000A RTF-2000A |
| iTA-7719A | 700MHz LOW/HIGH PCS AWS | 728-731.5MHz 1930-1950MHz 1930-1950MHz | 741-764MHz 1970-1990MHz 2110-2155MHz | 698-716MHz; 776-802MHz 1850-1910MHz 1710-1755MHz | RTF-1000A RTF-2000A |
| iTA-0819A | 850MHz PCS AWS | 869MHz 1930-1950MHz 1930-1950MHz | 879-894MHz 1970-1990MHz 2110-2155MHz | 824-849MHz 1850-1910MHz 1710-1755MHz | RTF-1000A RTF-2000A |
| iTA-9121A | EGSM900 UMTS2100 | 925-935MHz 2110-2130MHz | 945-960MHz 2150-2170MHz | 880-915MHz 1920-1980MHz; 2050-2090MHz | RTF-1000A RTF-2000A |
| iTA-9126A | EGSM900 LTE 2600 | 925-935MHz 2620-2630MHz | 945-960MHz 2650-2690MHz | 880-915MHz 2500-2570MHz | RTF-1000A RTF-2600A |