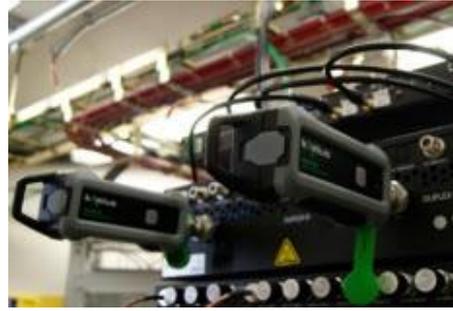# iVA - CABLE & ANTENNA ANALYZER

VSWR, Return Loss Measurement & Distance to Fault

The iVA Series Cable & Antenna Analyser is an exciting new product from Kaelus that enables users to accurately measure VSWR/return loss and the location of the VSWR/return loss faults in their RF infrastructure. The wireless connectivity allows unprecedented measurement flexibility and opens up new & important possibilities in sweep testing and multi-port testing.

The iVA is a rugged battery operated module that can be remotely controlled with any Bluetooth enabled tablet, smart phone, laptop computer or any of our iPA Series Portable Passive Intermodulation analysers.

iVA Product Features

- Reinventing site certification sweep testing, dramatically reducing test time on site

- Directly measure insertion loss and isolation when using multiple iVAs. Measure calculated insertion loss with a single iVA and an RF short

- Accurately measure swept VSWR/return loss and Distance-to-Fault (DTF) in RF path

- Simple and robust Bluetooth connection to a Tablet PC or connect with USB or Bluetooth to a laptop computer

- Connect directly to the device under test; eliminates the need for a phase stable cable in most cases

- With the Kaelus iPA controlling the iVA, your RL data can be combined with your PIM data into a single report. Reports are combined and completed on-site with no post-processing required

- Uses the Kaelus customer-proven iPA reporting workflow & tagging features to facilitate a faster, simpler and more efficient workflow

- Simple to operate, highly intuitive software user interface with the unique ability to generate and complete the test report on-site

- Geotag each test point, insert a Google Maps® snapshot directly into the report

- Handy Spectrum Monitor mode for interference checking

Cable loss can be measured either as a 1-port measurement, with the far end of the cable terminated in an open or short circuit, or directly measured for increased accuracy as a 2-port measurement using a second iVA

The iVA offers a novel multi-port S-parameter test capability using multiple iVAs. Up to 7 units can be connected simultaneously via Bluetooth, while up to 32 can be connected via USB. As an example, 6 iVAs could be used to perform measurements on a multi-port antenna. This configuration would cover all 36 transmission pathways (6x6), including the return loss at each port (6 measurements), and the transmission loss between every possible pair of ports (30 measurements). Return loss measurements made by the iVA contain both both magnitude and phase information, while transmission loss measurements are limited to magnitude only.

Return and Insertion Loss Example Traces:

Return Loss Trace

DTF Trace