

# **IWA SERIES**

## CABLE AND ANTENNA ANALYZER

The iWA series Cable & Antenna Analyzer is the evolution of our well respected and very reliable iVA platform. The iWA extended frequency range to 4GHz supports Land Mobile Radio (LMR) and 5G midband networks while enabling users to accurately measure and locate VSWR/return loss faults in their RF infrastructure. In addition, the Bluetooth wireless connectivity allows unprecedented measurement flexibility. The iWA is an ergonomically designed, rugged battery operated module that is remotely controlled with any tablet, smartphone or laptop computer.



### **FEATURES**

- Redefining site certification sweep testing, dramatically reducing test time on site
- Simple to operate, highly intuitive software user interface with the unique ability to generate and complete the test report onsite with no post-processing or additional data entry required
- Kaelus Unify software available for Android, iOS and Windows allows Kaelus iPA(s) and iWA(s) to combine your RL data with your PIM data into a single report.
- Geotag each test point, insert a Google Maps® snapshot directly into the report
- Instrument controlled via robust Bluetooth connection.
- Connect directly to the device under test; eliminates the need for a phase stable cable in most cases

### **TECHNICAL SPECIFICATIONS**

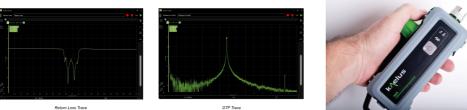
KEY SPECIFICATIONS		
	iWA-0140	
iWA analysis modes	Return loss, VSWR, Cable loss, Distance-to-fault (DTF)	
Frequency range - Return Loss	54MHz - 4100MHz	
Minimum frequency increment	1kHz	
Number of measurement points	1 to 4047	
ELECTRICAL - DC POWER CONSUMPTION		
Return loss mode	6W	
Standby (Idle)	0.6W	
Battery	Lithium-Ion 3.6V, 2350 mAh, 8.5Wh	
Battery charging method	USB-compatible power source connected to USB port of iWA	
Battery operating time	7.5 Hours at typical usage factor	

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IWA ANALYSIS MODE - RETURN LOSS		
Sweep speed	12ms per frequency point	
RF Output power	0dBm max	
Return loss dynamic range	40dB	
Cable loss measurement range*	0 - 20dB	
Return loss measurement accuracy	Applies over the temperature range −10°C to +45°C, with less than 5°C deviation from calibration temperature.	
0 - 10dB	± 0.4dB	
10 - 20dB	± 0.6dB	
20 - 30dB	± 1.5dB	
30 - 40dB	± 4.0dB	
Interference immunity	+10dBm at 500kHz offset from stimulus frequency	
System impedance	50ohms	
(*) Cable loss can be measured as a	1-port measurement, with the far end of the cable terminated in an open or short circuit. 20dB capability requires	

ideal connector return loss.



DTF Trace

INSTRUMENT CONTROL		
User interface	USB or Bluetooth supported user device with iWA application software installed	
Supported Devices	Tablet (iOS & Android) Smartphone (iOS & Android) PC, Windows 10 or higher	
Communications interface to iWA	Bluetooth and USB 2.0	
Bluetooth antenna	Integrated into housing	
MECHANICAL		
Dimensions H x D x W	52 x 69.5 x 216mm   2.06 x 2.73 x 8.51in	
Weight	0.7kg   1.54 lbs	
Connector 1	RF test port iWA-0140A: Type N male, 50 ohms iWA-0140B: 4.3-10 male, 50 ohms	
Connector 2	USB 2.0 Mini-B (for charging and connection to iPA or PC)	
Mechanical Shock & Vibration	MIL-PRF-28800F Class 2, ETS 300 019-2-1, -2, -7	
ENVIRONMENTAL		
Temperature range	-10°C to +55°C   +14°F to +131°F (operational)	
Ingress protection	IP54	
Altitude	4600m   15,000ft maximum	
Compliance	CE, FCC, RCM, RoHS	
Operational humidity	5% to 95% RH non-condensing	
Storage temperature range	-20°C to +60°C   -4°F to +140°F	

### **ORDERING INFORMATION**

MODEL	DESCRIPTION
iWA-0140A-NC	iWA Cable & Antenna Analyzer System, Type N male connector with Neoprene Soft Case
iWA-0140A-HC	iWA Cable & Antenna Analyzer System, Type N male connector with Hard Case
iWA-0140A-BK	iWA Cable & Antenna Analyzer System, Type N male connector with Basic Accessory Kit
iWA-0140A-SK-02	iWA Cable & Antenna Analyzer System, Type N male connector with Standard Accessory Kit
Note: Change A to B for 4.3-10 Connector	Eg. iWA-0140B-NC. iWA Cable & Antenna Analyzer System, 4.3-10 male connector with Neoprene Soft Case



MECHANICAL INTERFACE



CON N-TYPE (M)





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