

Smart Antenna for Tektronix USB Spectrum Analyzers

Alaris DF-A0047 Handheld Direction Finding Antenna (Offered by Tektronix)



Tektronix offers the Alaris DF-A0047 direction finding antenna for use in interference hunting applications with our USB spectrum analyzers and SignalVu-PC Map application software. The DF-A0047 contains multiple antennas and a user-selectable preamplifier to cover a broad range of interference frequencies and levels. Powered via USB, the DF-A0047 includes an integrated compass that transmits angle information to the SignalVu PC Map application for automatic creation of lines of bearing on the map.

Key specifications

- Frequency range: 20 - 8500 MHz
- 9 kHz-20 MHz extension module available

- 3 user-selected bands
- Internal preamp can be used or bypassed
- Rotating trigger-switch to control operating bands, preamp on/off and transmit bearing
- Horizontal or vertical polarization
- Operating temperature from -30 to +55 °C
- IP56 ingress protection
- Weighs 1.8 kg
- Includes armrest extension brace for easier handling in the field



Combined with a Tektronix USB spectrum analyzer, the Alaris DF-A0047 direction finding antenna makes interference hunting easy. Lines of bearing are automatically transmitted from the antenna to SignalVu-PC Map software, enabling fast triangulation on interference sources.

Specifications

All specifications are guaranteed unless noted otherwise. All specifications apply to all models unless noted otherwise.

Antenna

Antenna type	Combined loop / log-periodic dipole array
Frequency range	9 kHz - 20 MHz (DF-A0047-01) 20 - 500 MHz 500 - 8500 MHz
Nominal input impedance	50 Ω
VSWR	<3.5:1, typical
Antenna gain	Variable with frequency (< 600 MHz) 6 dBi (> 600 MHz)
Amplifier	Low noise, 8-18 dB gain, switched in/out
Power supply	5 V @ 200 mA maximum, via USB
Interface	USB 2.0
User inputs	Band selection by means of a rotary switch Active/passive selection by means of a push button Transmit angle information by releasing a push button
Angle detection	Digital compass, integrated with antenna
Mechanical	Form factor: Handheld
Dimensions	543 mm x 320 mm x 60 mm
Weight	1.8 kg
Environmental	
Operating temperature range:	-30 °C to +55 °C
Storage temperature range:	-30 °C to +71 °C
Ingress protection:	IP56

Ordering information

Regional availability

The Alaris DF-A0047 is not available from Tektronix in China, Japan, South Korea, Australia, New Zealand, Russia, Belarus, or Kazakhstan.

DF-A0047 direction finding antenna and accessories

Item	Description
DF-A0047	Directional antenna, 20 - 8500 MHz, with electronic compass and preamp
DF-A0047-01	Frequency range extension for DF-A0047 directional antenna, 9 kHz - 20 MHz
DF-A0047-C1	DF-A0047 antenna and DF-A0047-01 extension
016-2107-00	Transit case for DF-A0047 and DF-A0047-01
367-0612-00	DF-A0047-03 armrest for DF-A0047 and DF-A0047-01
407-6042-00	DF-A0047-04 compass dock
174-7019-00	CAB-A107 external cable

Warranty

One-year warranty. All service provided by Alaris Antennas. Contact support@alaris.co.za for service.

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For Further Information. Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit www.tek.com.

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