

# 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

<b>Antenna type</b>	Combined loop / log-periodic dipole array
<b>Frequency range</b>	9 kHz - 20 MHz (DF-A0047-01) 20 - 500 MHz 500 - 8500 MHz
<b>Nominal input impedance</b>	50 $\Omega$
<b>VSWR</b>	<3.5:1, typical
<b>Antenna gain</b>	Variable with frequency (< 600 MHz) 6 dBi (> 600 MHz)
<b>Amplifier</b>	Low noise, 8-18 dB gain, switched in/out
<b>Power supply</b>	5 V @ 200 mA maximum, via USB
<b>Interface</b>	USB 2.0
<b>User inputs</b>	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
<b>Angle detection</b>	Digital compass, integrated with antenna
<b>Mechanical</b>	Form factor: Handheld
<b>Dimensions</b>	543 mm x 320 mm x 60 mm
<b>Weight</b>	1.8 kg
<b>Environmental</b>	
<b>Operating temperature range:</b>	-30 °C to +55 °C
<b>Storage temperature range:</b>	-30 °C to +71 °C
<b>Ingress protection:</b>	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](mailto:support@alaris.co.za) for service.

**ASEAN / Australasia** (65) 6356 3900  
**Belgium** 00800 2255 4835\*  
**Central East Europe and the Baltics** +41 52 675 3777  
**Finland** +41 52 675 3777  
**Hong Kong** 400 820 5835  
**Japan** 81 (3) 6714 3086  
**Middle East, Asia, and North Africa** +41 52 675 3777  
**People's Republic of China** 400 820 5835  
**Republic of Korea** +822 6917 5084, 822 6917 5080  
**Spain** 00800 2255 4835\*  
**Taiwan** 886 (2) 2656 6688

**Austria** 00800 2255 4835\*  
**Brazil** +55 (11) 3759 7627  
**Central Europe & Greece** +41 52 675 3777  
**France** 00800 2255 4835\*  
**India** 000 800 650 1835  
**Luxembourg** +41 52 675 3777  
**The Netherlands** 00800 2255 4835\*  
**Poland** +41 52 675 3777  
**Russia & CIS** +7 (495) 6647564  
**Sweden** 00800 2255 4835\*  
**United Kingdom & Ireland** 00800 2255 4835\*

**Balkans, Israel, South Africa and other ISE Countries** +41 52 675 3777  
**Canada** 1 800 833 9200  
**Denmark** +45 80 88 1401  
**Germany** 00800 2255 4835\*  
**Italy** 00800 2255 4835\*  
**Mexico, Central/South America & Caribbean** 52 (55) 56 04 50 90  
**Norway** 800 16098  
**Portugal** 80 08 12370  
**South Africa** +41 52 675 3777  
**Switzerland** 00800 2255 4835\*  
**USA** 1 800 833 9200

\* European toll-free number. If not accessible, call: +41 52 675 3777

**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](http://www.tek.com).

Copyright © Tektronix, Inc. All rights reserved. Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specification and price change privileges reserved. TEKTRONIX and TEK are registered trademarks of Tektronix, Inc. All other trade names referenced are the service marks, trademarks, or registered trademarks of their respective companies.



13 Sep 2017 37W-60477-1

[www.tektronix.com](http://www.tektronix.com)

**Tektronix®**

**CalPlus GmbH**  
Zentrale Berlin  
Heerstraße 32 • 14052 Berlin  
Tel.: 030 214982-0 • Fax: 030 214982-50  
office@calplus.de • www.calplus.de

**CalPlus GmbH**  
Niederlassung ScopeShop  
Normannenweg 30 • 20537 Hamburg  
Tel.: 040 3039595-0 • Fax: 040 3039595-50  
scopeshop@calplus.de • www.calplus.de