

# Compact 4-Channel DF Antenna

400 – 8000 MHz

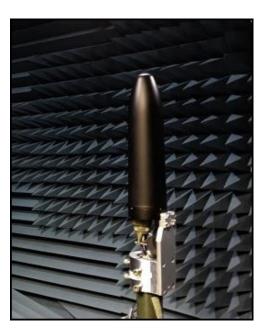
Product Code: DF-A0269

### SPECIFICATIONS:

| DF-A0269                               | RS485 communication interface and   |                                |
|--|---|--------------------------------|
|  | electronic compass<br>USB V2.0 communication interface, 64 ME<br>onboard memory |                                |
| DF-A0269-02                            |   |                                |
| DF-A0269-05                            | USB V2.0 communication interface,   |                                |
|  | integrated inertial navigation system and                                       |                                |
|  | 64 MB onboard memory  |                                |
| Electrical: DF                         |   |                                |
| Frequency range                        | 400 – 8000 MHz  |                                |
| Frequency bands                        | Band C: 400 - 2000 MHz  |                                |
|  | Band D: 2000 - 8000 MHz   |                                |
| Number of channels                     | 4   |                                |
| DF method                              | 4-channel Correlative Interferometer (CIDF)                                     |                                |
| RMS accuracy                           | 2° RMS  |                                |
| Polarisation                           | Vertical  |                                |
| Omni-output<br>Nominal input impedance | None<br>50 Ω  |                                |
|  | 00 32   |                                |
| Electrical:                            | DF-A0269  | DF-A0269-02 / -05              |
| Frequency range                        |   | 000 MHz                        |
| RF Amplification Gain                  | 20 ± 2 dB   | 20 ± 2 dB                      |
| Control                                | RS 485 serial at 115<br>kbaud   | USB V2.0                       |
| Switching time                         | < 100 µs using serial   | < 25 µs                        |
|  | commands  |                                |
|  | < 5 µs when using   |                                |
|  | dedicated lines   |                                |
| Integrated features:                   | DF-A0269 / -02  | DF-A0269-05                    |
| Navigation                             | Integrated compass  | Integrated GPS/INS             |
|  | Heading accuracy  | unit.                          |
|  | 2° RMS  | Heading accuracy<br>0.3° RMS   |
| GPS Antenna                            | Active (L1)   | Active (L1)                    |
|  | DF-A0269  | DF-A0269-02 / -05              |
| Onboard Storage                        | Model no., serial no.,  | 64MB flash in                  |
|  | user data fields  | addition to Model no           |
|  |   | serial no.,                    |
|  |   | user data fields               |
| Programming interface                  | None  | to integrated micro controller |
| RF calibration                         | RF chain calibration us   |                                |
|  | source or external applied signal   |                                |
| Power supply                           | 6 - 18 V DC   |                                |
| Power consumption                      | < 3 W   |                                |
| Interfaces:                            | •   |                                |
| Connector                              | MIL-DTL-38999 multi-pin connector   |                                |
| Antenna outputs                        | 4 x co-axial  |                                |
| Integrated GPS                         | 1 x co-axial  |                                |
| Ext cal input                          | 1 x co-axial  |                                |
| Control and power                      | 4 x digital   |                                |
| Programming                            | 4 x digital (DF-A0269-02 / -05 only)  |                                |
| Mechanical                             | Removable flange for vehicle or mast-   |                                |
|  | mounting<br>Various sockets for tripod / gooseneck                              |                                |
|  | various sources for the   | JUG / YUUSEIIEUK               |

1. VN-200 GPS/INS

### VERSION: 1.1



**PRODUCT DESCRIPTION:** 

The DF-A0269 is a dual band, compact DF antenna intended for direction-finding from 400 MHz to 8000 MHz.

The antenna presents patterns suitable for 4-channel correlative DF (CDF).

The DF-A0269 options include low noise amplifiers on each channel with passive bypass capability, an integrated noise source or optional external signal can be used for downstream RF chain calibration as well as various navigation options.

\*CA Application 2,853,219; \*EP Patent 2771943; \*U.S. Patent No. 14/353,382; \*ZA Patent No. 2014/02806

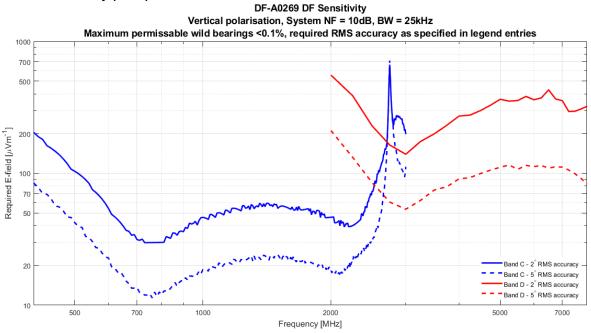
| Mechanical:                            |   |  |
|--|---|--|
| Dimensions                             | See outline below                               |  |
| Total mass                             | 1.1 kg incl bracket                             |  |
| Environmental: designed specifications | to meet the following                           |  |
| Wind survival                          | 160 km/h (without ice)                          |  |
| Temperature (operation)                | -30 °C to +70 °C                                |  |
| Vibration and shock                    | Designed to MIL-STD-810F<br>for ground vehicles |  |
| IP Rating                              | IP66  |  |

## **Compact 4-Channel DF Antenna**

400 – 8000 MHz

Product Code: DF-A0269

Antenna Sensitivity (TBC\*):



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Cyntony Corporation 195 Follen Road Lexington, Massachusetts sales@cyntony.com 781-430-0675



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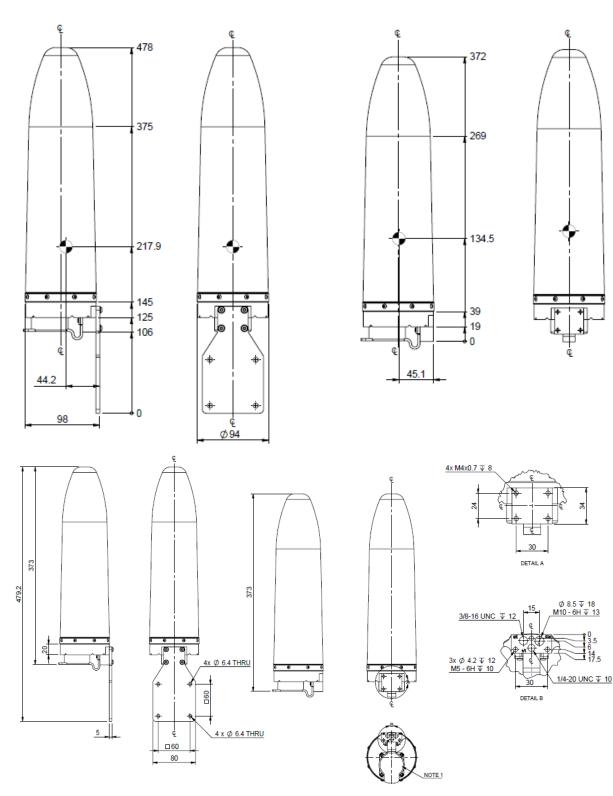
www.antennas.alaris.tech

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### **Mechanical Outline:**



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