

Antenna Authority, Inc.

DF Antennas Our Specialty!

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PRODUCT SPECIFICATION

Product Code --- AADF 3100 PROCESSOR



An Accurate Compact Processor for Mobile DF Operations

The AADF-3100 Mobile DF processor is a single channel DF system for vehicle, airborne, fixed, or shipboard use. It is designed to work with the covert series of annular slot antennas and can cover 1 MHz to 3 GHz in 5 bands. The system uses sign wave modulation to preserve the directional intelligence of the RF signal. These antennas are typically low profile or totally undercover.

For better gain and higher frequency coverage the AADF-3100 will also work with log periodic antenna systems that cover 600 MHz to 6 GHz in one band.

The AADF-3100 is designed to receive primarily vertically polarized signals.

The AADF-3100 provides all power and control to the antenna system through a single control cable. The received signal with bearing information encoded is routed to the receiver through RF coaxial cable.

The processor has RS-232 input for GPS information and interlaces this with the DF data that is sent to a computer for mapping and bearing plotting.

Back Panel



Perspective View



RF Performance Specifications

Frequency Coverage:	1 MHz to 3 GHz available Dependent on antenna and receiver
Azimuths Coverage:	360° in azimuth
Bearing Integration:	100 MS to 10 seconds Fast update on COR activation
Offset compensation:	0 deg to 360 deg
Calibration	Manually set depending on receiver and antenna
DF Technique:	Watson-Watt single frequency or sequential
Antenna(s):	Log-periodic dipole array Annular slot(s) multiple bays
Bearing Accuracy:	1 degree instrumental - final accuracy depends on antenna system

External receiver requirement compatibility

Icom 8500	w/Modified AGC and IF
AOR 8600	w/Modified AGC and IF
Miniceptor WJ 8609	
Nanoceptor SI-8631	
Picoceptor SI-8649	

Electrical Specifications

Power:	Voltage: 11.5 - 15.5 VDC Current 1 amps
Interface to computer	RS-232 8-N-1
Interface to GPS	RS-232 8-N-1
Polarization:	Vertical
Impedance:	50 ohms
Bands	Multiple
Connectors	BNC, DB-9 (optional Mil-Spec)

Mechanical Specifications

Dimensions:	Height: 3" (21.6 cm)-Width: 7" (30.5 cm) Depth: 7" (305 cm) Weight: 5 lbs (4.1 kg)
Environments:	Operating: -40°C to +60°C Storage: -40°C to +70°C Humidity: 95%
Features	Stable rugged construction Compact light weight Works in harsh conditions

Ordering Information

Model No. AADF-3100
For use with following antennas
Model No. QLPD-3120 Log Periodic antenna type
Model No. DASA-3160 Annular Slot Antenna type
Specifications subject to change without notice
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One year warranty