

Manpack/Mobile Watson Watt DF Antenna

20 – 6000 MHz

Product Code: DF-A0201-03

VERSION: 1.0

SPECIFICATIONS



PRODUCT DESCRIPTION

The DF-A0201-03 is a wideband DF antenna intended for fixed site direction finding from 20 to 6000 MHz.

The antenna array is implemented as a three-band vertical stack with the low frequency band enhanced with patented hybrid loop-Adcock technology to provide improved sensitivity vs traditional designs of the same form factor.

The antenna presents patterns suitable for the Watson Watt estimation method, as well as 3-channel correlative DF. Band switching is done via an integrated switch and control system. External and internal RF chain calibration is accommodated.

An optional isolating extension mast is available for installation on conductive surfaces. This provides improved performance over simply mounting the antenna directly to the structures.

Product codes:	
DF-A0201-03	Fixed site antenna array incl. band switch
Electrical: DF	
Frequency range	20 – 6000 MHz
Band B	20 – 700 MHz
Band C	700 – 2100 MHz
Band D	2000 – 6000 MHz
Channels per band	3
DF method	Watson-Watt or 3-channel correlative
RMS accuracy	< 5° (using only pure WW)*
Polarisation	Vertical
Omni-output	Provided as one of the DF channels
Electrical: band switch (fully integrated in antenna)	
Frequency range	20 – 6000 MHz
Control	- RS 485, - dedicated switching lines
Switching time	< 10µs when using dedicated lines
Stored information	Model no., serial no., user data fields
RF calibration	- Internal noise source - External cal injection option
Power supply	6 – 10 V DC
Power consumption	< 1 W
Interfaces:	
Antenna outputs	4 x TNC (f)
Control and Power	1 x MIL-DTL-38999 multi-pin
Mechanical	Flange mount
Mechanical:	
Dimensions (h x d)	777 mm x 135 mm
Mass	< 1.75 kg
Environmental: designed to meet the following specifications	
Temperature range	-30 °C to +70 °C (operating) -40 °C to +70 °C (storage)
Ingress protection	IP65
Shock and vibration	MIL-STD-810E 516.4, Cat 8, shock 40g

* Improved accuracy is possible using correlative methods

*CA Application 2,853,219;

*EP Patent 2771943;

*U.S. Patent No. 14/353,382;

*ZA Patent No. 2014/02806

Manpack/Mobile Watson Watt DF Antenna

20 – 6000 MHz

Product Code: DF-A0201-03

VERSION: 1.0

Gain and typical patterns:

