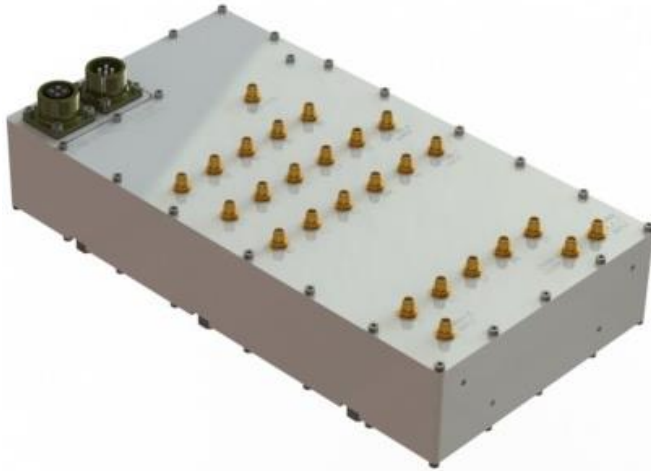


5-Channel Band Switch with Omni Amplifiers

1 – 3600 MHz

Product Code: DF-A0056

VERSION: 1.6



PRODUCT DESCRIPTION:

The DF-A0056 is a 3-band, 5-channel DF switch. It is particularly suitable for band selection on our DF-A0029 and DF-A0037 direction finding antennas. The switch is designed to be mounted internally within the weatherproof cavity in the antennas.

The switch comprises five parallel channels, each with input power limiting, ESD protection, low noise amplifier and band switch.

An omni channel amplifier module amplifies the three omni channels found in the DF-A0037 and dipoles them to feed the 2-channel monitoring receiver.

PRODUCT FEATURES:

- DF switch
 - 3-band, 5-channel switch
 - External injection mode chain calibration
 - Internal calibration noise source
 - High-speed solid state switching
- Omni amplifier
 - 3-channel omni amplifiers
 - Low noise amplifier on each input
 - Diplexer to combine Bands A and C
- Advanced input stages: limiters on each input on to allow operation in adverse EMC environments.
- Advanced output stages
 - Output amplifiers for long cables
 - Cable slope correction on amplifiers

APPLICATIONS:

- DF band switching and omni amplification for our range of DF antennas, particularly, DF-A0029 and DF-A0037

SPECIFICATIONS:

Electrical: DF chain	
Frequency range	1 – 3600 MHz
Input VSWR	< 2.5:1
Input connectors	15 SMA female
Output connectors	5 SMA female
Noise figure	< 8 dB
Gain, < 100 MHz	8 ± 2 dB
Gain, 1 GHz	12 ± 2 dB
Gain, 3 GHz	18 ± 2 dB
Parallel channels	5
Bands per channel	3
Output IP3	30 dBm (below 1 GHz) 27 dBm (above 1 GHz)
Maximum input level	30 dBm CW, 45 dBm pulse
Electrical: cal chain	
Cal input connector	SMA female
Amplitude imbalance	< 2 dB
Phase imbalance	< 20°
Gain	-8 ± 6 dB
Max input level	20 dBm
Output level of internal noise source	+40 to +56 dB ENR
Electrical: omni amplifiers	
Input connectors	3 x SMA female
Output connectors	2 x SMA female
Input VSWR	< 2.5:1
Diplexer	Bands A and C combined. X-over 300 ± 50 MHz
Noise figure	< 8 dB
Gain, < 100 MHz	9 ± 2 dB
Gain, 1 GHz	13 ± 2 dB
Gain, 3 GHz	19 ± 2 dB
Output IP3	30 dBm (below 1 GHz) 27 dBm (above 1 GHz)
Maximum input level	30 dBm CW, 45 dBm pulse
Electrical:	
Power supply	19 – 36 V DC, 1.5 A
Control	EIA-485 (RS-485)
Mechanical:	
Dimensions	317 mm x 168 mm x 80 mm
Total mass	3.2 kg
External material	Aluminium
Environmental: designed to meet the following specifications	
Temperature range	-20 °C to +70 °C
Vibration	0.02 g ² /Hz, 2 – 300 Hz
Shock	40 G for 10 ms
Thermal shock	-20 °C to +70 °C
Water ingress rating	IP54