



## PRODUCT DESCRIPTION:

The DF-A0239 is a high-speed 6- to 3-channel commutating switch intended for switched elements direction finding applications. The switch works in combination with a band switch\* and can accommodate up to 4 bands, each with 6 antenna elements, and routes any 3 elements of a selected band of 6 elements to any of the 3 outputs. The switch is designed to be mounted internally within the weatherproof cavity of the DF-A0029, DF-A0037 and DF-A0095 direction finding antennas, as well as the DF-A0057 outdoor enclosures designed for use with the DF-A0001, DF-A0007, DF-A0038, DF-A0062 and DF-A0136.

The switch accepts a very wide input voltage range and is controlled via hardwired logic lines or an EIA-485 (RS-485) interface. The commutation table can be programmed via the RS-485 interface. Commutation is triggered via an external strobe line. All switching is solid state for rapid commutation and unlimited switching cycles.

## PRODUCT FEATURES:

- 6- to 3-channel commutating switch
- High-speed solid state switching

## APPLICATIONS:

- DF band switching for Alaris' range of DF antennas, particularly, the DF-A0029, DF-A0037 and DF-A0095

**\*Note: Band switch is sold separately**

## SPECIFICATIONS:

<b>Electrical: DF chain</b>	
Frequency range	1 – 6000 MHz
Input VSWR	< 2.5:1
Maximum input level	30 dBm CW, 45 dBm at 1% duty factor in 1µs pulse
Input connectors	SMA female
Output connectors	SMA female
<b>Power and control:</b>	
Power supply	19 – 36 V DC, 1 A
Control interface	EIA-485 (RS-485), hardwired lines
Commutation time	< 10 µS
<b>Mechanical:</b>	
Dimensions	317 mm x 170 mm x 40 mm
Total mass	< 1.5 kg
External material	Aluminium
<b>Environmental: designed to meet the following specifications</b>	
Temperature range	-40 °C to +70 °C
Vibration	0.02 g <sup>2</sup> /Hz, 2 – 300 Hz
Shock	40 G for 10 ms
Thermal shock	-20 °C to +70 °C
Water ingress rating	IP54