



Model Number: 23192-XXXX

RF Engineering
and Custom Build

L-band Yacht Antenna Redundancy Switch

With Local Control



Front View of Model 23192-XXXX

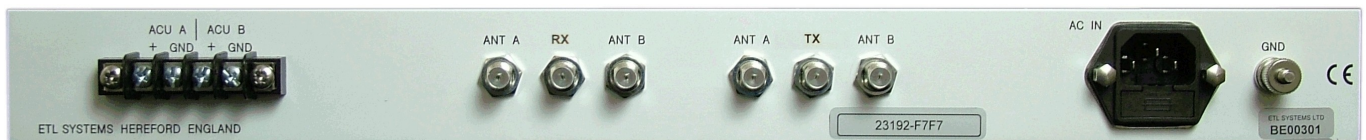
This VSAT antenna redundancy switch or arbitrator is designed to switch TX and RX feeds between two antennas and is designed for use on yachts or ships, where blocking requires automatic switching between the antennas.

The redundancy switch contains two 2:1 switches (one for TX and one for RX) and both are simultaneously switched, by a dry (voltage free) contact signal from the antenna controllers (ACU).

The redundancy switch can be operated in AUTO or MANUAL modes. In AUTO mode the switch position is changed by the input from the 2 antenna ACU's. In MANUAL mode it can be switched from a push button on the front panel.

LEDs on the front panel indicate the mode and the selected antenna as well as power on and PSU status

The switches pass from DC and 10MHz from the modem for LNB and BUC powering and referencing (for the active antenna only).



Rear view of Model 23192-F7F7 (with 75Ω F-type connectors)

The unit is supplied with 75 ohm F-type connectors, but a range of connector types and impedances are available (model numbers will vary).





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Technical specifications and operating parameters

RF Parameters					
Capacity	2 inputs x 1 outputs		Dual		
Frequency Range	850-2150 MHz (L-band)				
Connector & impedances	50Ω SMA	50Ω N-type	50Ω BNC	75Ω BNC	75Ω F-type
Insertion Loss	0.75± 0.5 dB	0.75± 0.5 dB	0.75± 0.5 dB	0.75± 0.5 dB	0.75± 0.5 dB
Flatness	±1.0 dB	±1.0 dB	±1.0 dB	±1.0 dB	±1.0 dB
Input return loss	Typical	10 dB	16 dB	10 dB	10 dB
	Minimum	8.5 dB	14 dB	8.5 dB	8.5 dB
Output return	Typical	10 dB	16 dB	10 dB	10 dB
	Minimum	8.5 dB	14 dB	8.5 dB	8.5 dB
Isolation	I/P-O/P	60 dB			
	I/P-I/P	60dB			
LNB Power Pass	Passed from modem to Active antenna only		18 VDC 500mA nominal		
BUC Power Pass	Passed from modem to Active antenna only		24 VDC 500mA nominal		
10 MHz Pass	Passed from modem to Active antenna only		For TX & RX		
Automatic Switching Time	200 ms typical				

Physical	
Dimensions	1U high x 350mm deep x 19" wide
Weight	3 kg
Colour	White 00-E-55 semi-gloss

Environmental		
Operating temperature	0 to 45°C	
Location	Indoor use only	
Storage temperature	-20°C to +75°C	
Humidity	20 to 85% non-condensing Relative Humidity	Relative Humidity

Power		
AC Consumption	85-264Vac 50/60Hz	
PSU	Dual redundant	Diode shared, single mains inlet
Hot-swap PSU	No	

Key Features	
Dual redundant switch	
Local Control and auto control based on ACU input	
Dual redundant power supplies	

Preliminary Specifications

System Control	
Local Control	Via front panel push buttons
Alarms	Dry contact alarm connectors on rear panel for each antenna

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