Model Number: 23116-xxxx

RF Engineering
and Custom Build

2 x 1 L-band Redundancy Switch

With Local & Remote Control (via RS232/RS485 or RJ45 ports)

Front View of Model 23116-xxxx

This ETL 2 x 1 L-band redundancy switch incorporates an RF detection system and automatic switching of one of two inputs to the output. The system monitors the Main and Standby signals.

In Auto mode, it switches from Main to Standby feed in the event of the failure of the Main feed, if a Standby feed is present. The switch also monitors the Standby feed, and if this fails it will switch back to the Main feed if present. In Manual mode it is switched from the front panel. Remote selection of manual and auto mode and remote switching from Main to Standby and vice versa is also possible. A contact-driven remote mode is also provided.

Rear View of Model 23116-B5B5 (with 50 ohm BNC connectors)

The unit also benefits from dual redundant power supplies which are monitored via front panel LEDs and a dry contact alarm port on the rear panel.

This switch is available in a variety of connector types and impedances (model numbers will vary).

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2 x 1 L-band Redundancy Switch with Local & Remote Control (via RS232/RS485 or RJ45 ports)

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Technical specifications and operating parameters

RF Parameters						
Capacity		2 x 1				
Frequency Range		850-2150 MHz (L-band)				
Connector & impedances		50Ω SMA	50Ω N-type	50Ω BNC	75Ω BNC	75Ω F-type
Gain (dB)		0±1.0	0±1.0	0±1.0	0±1.5	0±2.0
Gain flatness (dB)	850-2150MHz	±1.25	±1.25	±1.25	±1.5	±1.5
	Any 36MHz	±0.50	±0.50	±0.50	±0.50	±0.75
Input return loss (dB)	Typ.	15	15	15	12	12
	Min	11	11	10	9	9
Output return loss (dB)	Typ.	15	15	15	12	12
	Min	11	11	10	9	9
Isolation	I/P-O/P	55dB	65 dB typical			
	I/P-I/P	60dB	65 dB typical			
1dB Compression		0dBm	Typical +3dBm			
Noise Figure		8 dB				
Operational Range *		-60 dBm to -10 dBm	50 dB dynamic range. Limits may be set within this range			
Automatic Switching Time		200 ms typical from detection of failure				

System Control	
Remote Control	Via RJ45 Ethernet port or RS232/485 Serial Port
Local Control	Via front panel push buttons
Display	Front panel LED's indicating operational mode and power supply status
Alarms	Dry contact alarm port on rear panel for PSU failure

** Power level detection accuracy is typically ± 1 dB across the mid range and ± 2.5 dB at the extreme ends of the range. This could result in differing power levels reported by the unit.*

Power		
AC Power	85-264V AC (50/60Hz) Fused 2A	
AC Consumption	5W, Max. Consumption at steady state	
LNB Power	None	
PSU	Dual redundant	Diode OR
Hot-swap PSU	No	
Input RF Power	+16dBm (Absolute maximum)	

Environmental	
Operating temperature	0 to 50˚C
Location	Indoor use only
Storage temperature	-20˚C to +75˚C
Humidity	20-85% non-condensing

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

Key Features
Three operational modes
RF detection on main and standby feeds
Auto switchover in case of signal failure
Local and remote control
Dual redundant power supplies

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RoHS COMPLIANT

THE QUEEN'S AWARDS FOR ENTERPRISE: 2007

THE QUEEN'S AWARDS FOR ENTERPRISE: 2009

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