



Model Number: 23177-S5S5

RF Engineering  
and Custom Build

## 2 x 2 DC-6GHz Switch

With Local & Remote Control (via external alarm contacts)



Front View of Model 23177-S5S5

This 2x2 switch operates over the DC to 6GHz frequency range. It is designed to be controlled from the external alarm contacts of devices such as modulators. The unit can be controlled locally via front panel push buttons and remotely via an external alarm contact on the rear panel.

The shelf can be operated in manual or auto mode – selected by a push button on the front panel. A second push button on the front panel allows manual switching between the Main and Standby feeds in manual mode.

The three groups of LEDs show the shelf status. The AUTO and MANUAL LEDs show whether the external contacts (AUTO) are used or the right hand push button (MANUAL) is used to select switch status. The MAIN ONLINE and STANDBY ONLINE LEDs show which path is selected in both automatic and manual modes. The three LEDs on the right show power available (green LED) or individual failure of either of the dual redundant power supplies.



Rear View of Model 23177-S5S5

This particular unit is supplied with 50 ohm SMA 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	2x2	
Frequency Range	DC-6 GHz	
Insertion Loss	DC-1GHz	<0.10 dB
	1-2GHz	<0.15 dB
	2-4GHz	<0.20 dB
	4-6GHz	<0.30 dB
Return Loss	DC-1GHz	>26 dB
	1-2GHz	>23 dB
	2-4GHz	>20 dB
	4-6GHz	>17 dB
Isolation	DC-1GHz	>80 dB
	1-2GHz	>80 dB
	2-4GHz	>80 dB
	4-6GHz	>70 dB
Switch Type	Coaxial relay transfer switch (failsafe)	1,000,000 cycle minimum life; mounted on rear panel

System Control		
Local Control	Via front panel push buttons	Auto/Manual mode; Main/Standby path
Remote Control	Via rear panel external alarm contacts	
Feeds	Main & Standby	In OK condition Main is connected to "On Line" & Standby to "Off Line"
Operations	Manual & Auto	In manual mode the unit is switched via push buttons on the front panel. In auto mode it is switched via external alarm contacts. Dry change-over alarm contacts must be provided by the modems
Display	Front panel LED's for PSU status and operational mode	

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

Physical	
Input Connector	SMA
Input Impedance	50Ω
Output Connector	SMA
Output Impedance	50Ω
Dimensions	1U high x 350mm deep x 19" wide
Weight	8 kg
Colour	White 00-E-55 semi-gloss

Power	
AC Power	85-260Vac 50/60Hz
LNB Power	None
PSU	Dual redundant
Hot-swap PSU	No

Key Features
DC-6 GHz
Local & Remote Control
Dual redundant power supplies
Manual & Auto Operational Modes

ETL SYSTEMS LIMITED  
Coldwell Radio Station  
Madley  
Hereford  
England HR2 9NE

TELEPHONE  
+44 (0)1981 259020  
  
EMAIL  
info@etlsystems.com

FACSIMILE  
+44 (0)1981 259021  
  
WEB  
www.etlsystems.com

