



Model Number: M1616C3UFI-B7B7

RF Engineering
and Custom Build

16 x 16 IF Combining Matrix

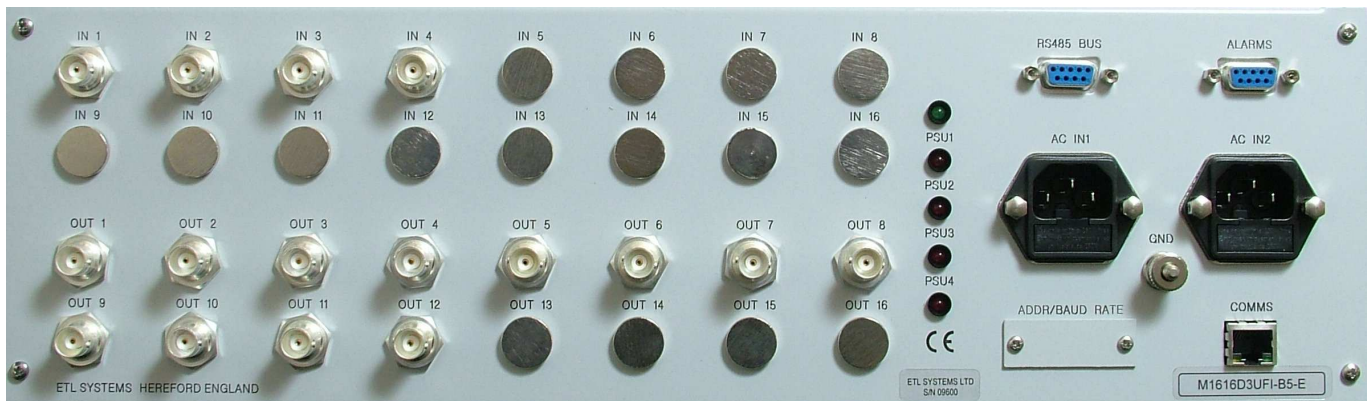
With Local & Remote Control (via RS232/422/485 Serial Port)



Front View of Model M1616C3UFI-B7B7

The ETL 3U IF combining matrix is a high performance switch matrix (or router) with up to 16 inputs and 16 outputs, integrated power supplies and matrix controller in a 3U high shelf. This unit can be locally controlled via front panel push buttons and LCD Display or remotely via the rear panel serial port.

The matrix incorporates a standard ETL controller which can be remotely controlled via either a PC (using ETL software) or integrated into an M & C system. Dual redundant integrated power supply modules provide security against the impact of unforeseen failure. In the event of total power failure, all matrix settings are retained.



Rear View of similar 16 x 16 Matrix with Ethernet port option (Model M1616D3UFI-B5B5-E)

The unit is supplied with 75 ohm BNC connectors, but a range of connector types and impedances are available, as well as the option of an Ethernet Port for remote control (model numbers will vary). The unit can be supplied in a partially populated state but the units must be returned to base for later expansion or maintenance. Modular expansion is possible by linking the matrix to other slave units via the serial port.





Model Number: M1616C3UFI-B7B7

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16 x 16 L-band Combining Matrix with Local & Remote
Control (via RS232/422/485 Serial Port)

Technical specifications and operating parameters

RF Parameters		
Capacity	16 inputs x 16 outputs	
Frequency Range	20-200MHz (IF)	
Gain	3 dB nominal (± 2 dB)	
Flatness	20-200MHz	± 1.5 dB
	70 \pm 18MHz	± 0.5 dB
	140 \pm 36MHz	± 0.5 dB
1dB Compression	-10 dBm	
Isolation (Adjacent channel)	>60 dB typically	
Noise Figure	7.5 dB	
Group Delay	1.7ns across L-band	
Phase Noise	Compliance with IESS phase noise mask	
Input Return Loss	>10 dB	
Output Return Loss	>10 dB	

System Control	
Local Control	Via Front Panel LCD display and push buttons, allowing IP settings changes and shows PSU status
Remote Control	Via Serial (RS232/422/485) Port on rear panel Ethernet (RJ45) Port available as an option
Display	Front Panel LCD display
Alarms	Dry contact alarm port on rear panel for PSU failure

Physical	
Input Connector	BNC
Input Impedance	75 Ω
Output Connector	BNC
Output Impedance	75 Ω
Dimensions	3U high x 450mm deep x 19" wide
Weight	11kg
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	85% non-condensing

Power	
AC Power	85-264Vac 50/60Hz
LNB Power	None
PSU	Dual redundant
Hot-swap PSU	No

Key Features	
Local and Remote Control	
Front Panel LCD Display	
Dual redundant power supplies	

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