



Model Number: M1616C3UFL-B5B5

RF Engineering
and Custom Build

16 x 16 L-band Combining Matrix

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



The ETL 3U L-band 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.

Front View of Model M1616C3UFL-B5B5

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 Matrix (Model M1616D3UFL-B7B7 part populated to 8 x 16)

The unit is supplied with 50 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.





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Technical specifications and operating parameters

RF Parameters	
Capacity	16 inputs x 16 outputs
Frequency Range	850-2150MHz (L-band)
Gain	3 dB nominal (± 2 dB)
Flatness	± 2.0 dB
1dB Compression	0 dBm
Isolation (Adjacent channel)	>40 dB typically
Noise Figure	7.5 dB
Group Delay	2.7ns across L-band
Phase Noise	Compliance with IESS phase noise mask
Input Return Loss	>10 dB
Output Return Loss	>10 dB

Physical	
Input Connector	BNC
Input Impedance	50 Ω
Output Connector	BNC
Output Impedance	50 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

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

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	

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

