



16 x 16 Combining L-band Matrix

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. Any or many input can be routed to any or a few outputs, making it a very useful component in the Transmit chain of a satellite ground station.



Picture of 16x16 Combining L-band Matrix

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. The unit is normally equipped with BNC connectors but SMA or F-type connectors can be fitted. 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 slave units via RS485.

ETL Model Number – M1616C3UFL-B5



RESILIENCE FLEXIBILITY RF PERFORMANCE

Technical Specifications



• RF Parameters

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

• System Control

Local Control	Push Buttons
Remote Control	RS232/485 serial (or RJ45 Ethernet connection-as an option, see M1616C3UFL-B5-E)

• Environmental

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

• Physical

Connectors	BNC (others available)
Impedance	50 Ω
Dimensions	3U high x 450mm deep x 19" wide
Weight	11 kgs
Colour	White 00-E-55 Semi-Gloss Front Panel

• Power

AC Power	85-264Vac 50/60Hz
LNB Power	None available
PSU	Dual
PSU Redundancy	Yes

• Key Features

- Unity Gain
- Integrated Controller
- Retains settings if power/comms with controller fails

ETL Systems develop, design and manufacture specialist equipment for satellite ground stations. For a fuller description of the ETL product range, please visit our website. This range can be used as the basis to meet your specific demands.

For additional information or details, please contact us at:



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