



# 16 x 16 IF Matrix

The ETL 3U IF distributive 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.



*Picture of similar 16x16 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 and 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 other slave units via RS485.

ETL Model Number – M1616D3UFI-B7



**RESILIENCE**

**FLEXIBILITY**

**RF PERFORMANCE**

# Technical Specifications



## • RF Parameters

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Capacity	16 inputs x 16 outputs
Frequency Range	20 – 200MHz
Insertion Gain	+ 3 dB nominal ( $\pm 2$ dB)
1 dB Compression	-10 dBm
Noise Figure	7.5 dB
Flatness	
20-200MHz	$\pm 1.5$ dB
70 $\pm$ 18MHz	$\pm 0.5$ dB
140 $\pm$ 36MHz	$\pm 0.5$ dB
Isolation (I/P to O/P)	60 dB
Input Return Loss	10 dB typical
Output Return Loss	10 dB typical

## • System Control

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Local Control	Push Buttons
Remote Control	RS232/485 serial (or RJ45 Ethernet connection, as an option – see M1616D3UFI-B7-E)

## • Environmental

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

## • Physical

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Connectors	BNC (others available)
Impedance	75 $\Omega$
Dimensions	3U high x 450mm deep x 19" wide
Colour	White 00-E-55 Semi-Gloss front Panel

## • Power

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

## • Key Features

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Integrated Controller

Retains settings of power/comms with controller fails

Unity Gain

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.

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