



Model Number: M0816D2UFL-21161-B7B7

8 x 16 L-band Matrix

With LNB Powering, local and remote control (via RS232/422/485 Serial and RJ45 Ethernet Port)



The ETL L-band distributive matrix is a high performance switch matrix (or router) with up to 8 inputs and 16 outputs, integrated hot swap power supplies in a 2U high shelf. The matrix design has been optimised for earth stations which are non-symmetric in terms of number of inputs and outputs.

Front View of Model M0816D2UFL-21161-B7B7

Local control is via the front panel display, which allows IP settings changes and shows CPU status. Remote control of the unit is done via an Ethernet port (SNMP and TCP/IP), and via an RS232 / 422 / 485 serial port on the rear panel. The matrix has the additional advantage of providing LNB powering to each of the RF inputs (which can be switched on / off remotely). LNB current is continuously monitored and reported externally. In the event of total power failure, all matrix settings are retained.



Rear View of Model M0816D2UFL-21161 with 75 ohm F-type connectors

The unit can be supplied in a partially populated state but the units must be returned to base for later expansion or maintenance.

The unit is supplied with 75 ohm BNC connectors, but a range of connector types and impedances are available.





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RF Engineering and Custom Build

Technical specifications and operating parameters

PRELIMINARY SPECIFICATIONS

| RF Parameters | | |
|--------------------|---|--------------------------|
| Capacity | 8 inputs x 16 outputs | |
| Frequency Range | 850-2150 MHz (L-band) | |
| Gain | 0 dB \pm 2 dB nominal, mean across band | |
| Flatness | 850-1450MHz | \pm 1.25 dB |
| | 850-2150MHz | \pm 2.5 dB |
| | Over any 36MHz | \pm 0.5 dB |
| 1 dB Compression | 0 dBm | |
| Noise Figure | 19 dB | |
| Isolation | I/P-I/P | 55 dB |
| | O/P-O/P | 55 dB |
| | I/P-O/P | 40 dB 50 dB typical |
| Input Return Loss | 10 dB typical | |
| Output Return Loss | 10 dB typical | |

| Power | |
|--------------|---|
| AC Power | 85-264Vac 50/60Hz Fused 2A |
| LNB Power | 400mA @ 18V dc per input, individually selectable |
| PSU | Dual redundant |
| Hot-swap PSU | No |

| 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 | BNC |
| Input Impedance | 75Ω |
| Output Connector | BNC |
| Output Impedance | 75Ω |
| Dimensions | 2U high x 450mm deep x 19" wide |
| Weight | 8 kg |
| Colour | White 00-E-55 semi-gloss |

| System Control | |
|----------------|---|
| Display | LCD Display, which allows IP settings changes and shows CPU status |
| Local Control | Front Panel LCD display & keypad |
| Remote Control | Via Serial (RS232/422/485) Port and Ethernet (RJ45 10/100 base T, TCP/IP & SNMP) Port on rear panel |
| Alarms | Dry contact alarm port on ear panel for PSU failure |

| Key Features | |
|--|--|
| Local and remote control | |
| LNB Powering | |
| Dual redundant power supplies | |
| Matrix settings retained in the event of total power failure | |

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