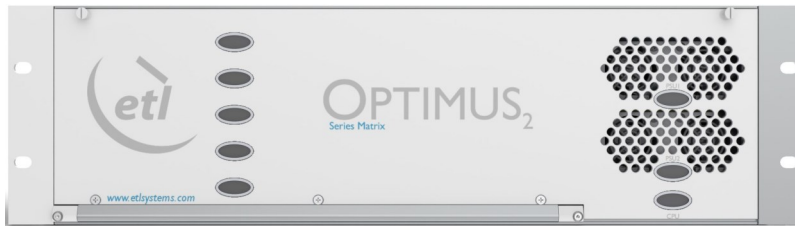




Model Number: OPT-20

Optimus L-band Matrix Router

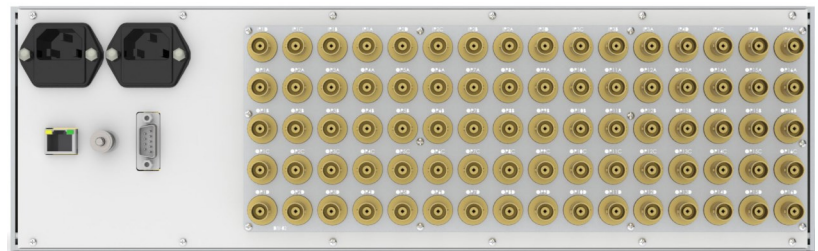
Configurable as quad 4 x 16, dual 4 x 32 or single 4 x 64 matrices with remote PC and IRD control



Front View of Model OPT-20 Optimus Matrix

ETL's new Optimus matrix provides compact form factor, flexible configurations, hot-swap of active components, and remote control via a PC and / or from IRD's via 13/18V 22KHz tone.

The matrix comprises 4 RF switch cards plus an input module which are combined to provide a shelf with quad 4x16, dual 4x32, or a single 4x64 matrix in a 4U high 19" shelf.



Rear View of Model OPT-20 Optimus Matrix

The RF modules can be hot-swapped, as can the dual redundant PSU's and CPU.

Optimus also provides LNB Powering which can be remotely (via Ethernet port) set to 0/13/18V with 22KHz tone. LNB current monitoring can also be done via the Ethernet port. A dry contact alarm port is provided on the rear panel for PSU failure.

Key Features

- Configurable as quad 4 x 16, dual 4 x 32 or single 4 x 64 matrices
- Dual Redundant Hot-Swap PSU's
- Hot-swap CPU card
- Hot-swap RF modules
- Remote PC & IRD control
- 13/18V LNB Powering & 22KHz tone
- Ethernet monitoring & control
- Dry contact alarm port for PSU failure





Model Number: OPT-20

RF Engineering
and Custom Build

Optimus L-band Matrix Router

Technical specifications and operating parameters

| RF Parameters | | |
|-----------------------------|---------------------------------------|--|
| Routing | Distributive, non-blocking. | Any input can be connected to any number of outputs. |
| Capacity | 1x Input Card & up to 4x Output cards | Expandable to 4x16, 4x32, 4x48 or 4x64 |
| Frequency Range | 850-2150 MHz (L-band) | |
| Gain | 0 ± 2.0 dB | Mean across band |
| Gain vs. Frequency Flatness | ± 2.5 dB | |
| P1dB (Output) | +3 dBm | |
| Noise Figure | 25 dB | Typical |
| Group Delay | ≤1.0 ns | Pk-pk, any 60MHz segment |
| Input Return Loss | 10 dB min | All RF Ports |
| Output Return Loss | 10 dB min | All RF Ports |

| Power | | |
|----------------|----------------------|--------------------------|
| AC Consumption | 150W max consumption | |
| AC Power | 85-265Vac, 47-63Hz, | Fused 2A |
| LNB | 13V/18V/22KHz. | 350mA max on each input. |
| PSU | Dual redundant | Dual mains inlets |
| Hot-swap PSU | Yes | |

| Physical | |
|------------|---|
| Inputs | 50 or 75Ω, BNC, SMA or F-type connectors. |
| Outputs | 50 or 75Ω, BNC, SMA or F-type connectors. |
| Dimensions | 3U high x 500mm x 19" wide |
| Weight | 6 kgs |
| 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 | 20 to 90% non-condensing |

| System Control | |
|----------------|--|
| Remote Control | Via RS232/485 serial port or Ethernet. 10/100 Base T. TCP/IP, SNMP or IRD voltage. |

| Key Features | |
|--|--|
| Single, Dual or Quad Matrix | |
| Hot-swap RF and CPU modules | |
| Dual redundant, hot-swap power supplies | |
| LNB Powering 0/13/18V DC & 22KHz Tone | |
| Remote Control via Ethernet port, serial port, or 13/18V DC & 22KHz tone on/off on RF output ports | |
| LNB current monitoring | |
| Dry contact alarm port for PSU failure | |

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