ETL Systems
New technologies
in RF distribution

Model Number:
22302-DIV24-Gx-Sy

# 32 x 2-way Active L-band Splitter Shelf

## for Matrix Systems

**Typical applications:**

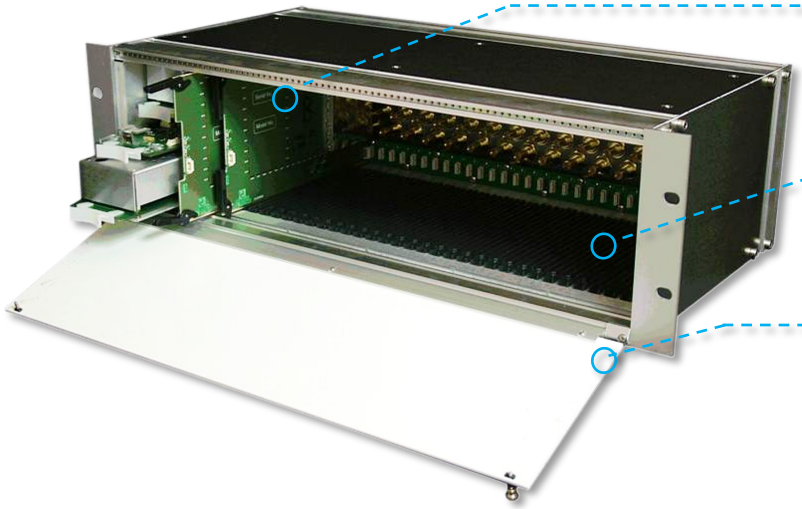
- Linking RF Matrices in expanding satellite teleports.
- Can be used for high density RF distribution chassis where rack space is limited
- As a replacement for non hot-swap passive systems to improve system design.

The unit is designed to link ETL's range of matrices to make bigger matrix systems, while saving rack space and offering excellent RF performance.


**Fixed gain & Fixed slope** factory set to balance input signals

**Compact**
32 2-way splitter modules housed in a 3U high , 19", rack mountable chassis

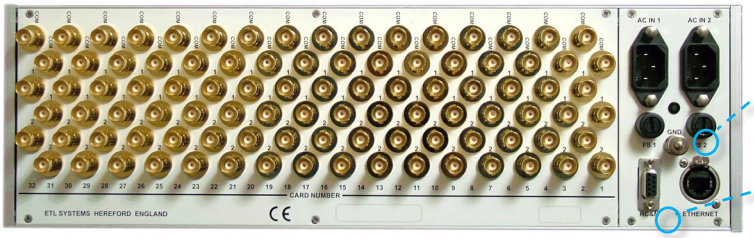
**Resilience** from hot swap splitter modules, hot swap dual redundant power supplies and a hot swap CPU



**Local monitoring**
via status LEDs on individual modules

**850 - 2150 MHz**
operating frequency range.

**Remote control & monitoring** via RJ45 Ethernet port with SNMP & web browser interface




**Dry contact alarm port & serial communications**
for amplifier & power supply status

V 1.4 E&OE

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### Technical specifications and operating parameters

| RF Parameters | | | | | |
|---|---|---|---|---|---|
| 22302 Module slots used | | Each splitter takes 1 slot. 32 slots available in chassis. | | | |
| Capacity | | 2-way splitter | | | |
| Frequency Range | | 850-2150 MHz (L-band) *See application note below for use above 2150MHz. | | | |
| Gain | | x± 1dB | | x=0 to 10 dB. Nominal at 2150 MHz | |
| Slope | | y dB positive slope | | y=0 to +6 dB. Typical slope across 850-2150 MHz. | |
| RF Connectors | | 50Ω SMA | 50Ω BNC | 75Ω BNC | 75Ω F-type |
| Flatness | 850-2150MHz | ±0.75 dB | ±1.0 dB | ±1.8 dB | ±2.0 dB |
| | Any 36MHz | ±0.45 dB | ±0.70 dB | ±1.2 dB | ±1.4 dB |
| Input Return Loss | Typical | 16 dB | 14 dB | 12 dB | 10 dB |
| | Minimum | 12 dB | 12 dB | 10 dB | 8 dB |
| Output Return Loss | Typical | 16 dB | 14 dB | 12 dB | 10 dB |
| | Minimum | 12 dB | 12 dB | 10 dB | 8 dB |
| Isolation | Card to Card | >70 dB, 80 dB typical | | | |
| | O/P - O/P | >20 dB, 25 dB typical | | | |
| Noise Figure | | 7 dB Typical | | | |
| 1dB GCP | | +3 dB Minimum 1dB Gain Compression Point, output power | | | |
| Input RF Power | | + 16 dBm Absolute maximum | | | |

***Extended Frequency Use Application Note:**
These cards may be used for frequencies above 2150MHz with little degradation to the return loss performance up to 3000MHz; but note that the insertion gain typically plateaus at 2150MHz (the slope pivot point). This lack of slope compensation is likely acceptable for short cable runs (<2m). Please contact ETL Systems for further information if required.

Note 1: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved spec accuracy.

Note 2: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage.

| Environmental | |
|---|---|
| Operating temperature | 0 to 45˚C |
| Location | Indoor use only |
| Storage temperature | -20˚C to +75˚C |
| Humidity | 20 to 90% non-condensing |

| Power | | |
|---|---|---|
| PSU Power | 85-264Vac 50-60Hz | Fused 2A, Dual IEC |
| Power Consumption | <30 W | Fully populated with DIV24 cards |
| LNB Power | None | |
| PSU | Dual redundant | Diode OR |
| Hot-swap PSU | Yes | |
| RF Monitoring | None | |

| System Control | | |
|---|---|---|
| Local Control | Via Front Panel LCD and push buttons | |
| Remote Control | Via RS232 serial port & RJ45 Ethernet port 10/100 Base T. TCP/IP, SNMP & Web browser interface. | |
| Alarms | LED via CPU in chassis | Also amplifier status monitoring via HMI when used in a matrix switch system. |

| Physical | |
|---|---|
| Dimensions | 3U high x 250mm deep x 19" wide |
| Weight | <10 kg |
| Colour | RAL9003-White (semi-matte) |

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