



# 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

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.

### 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.



**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

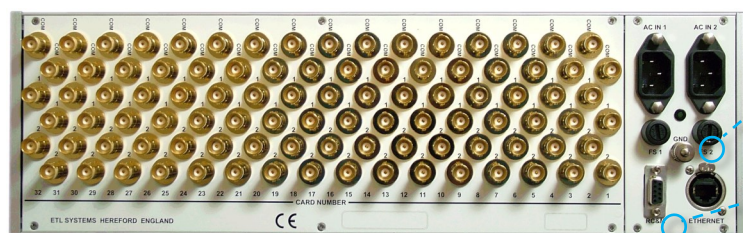
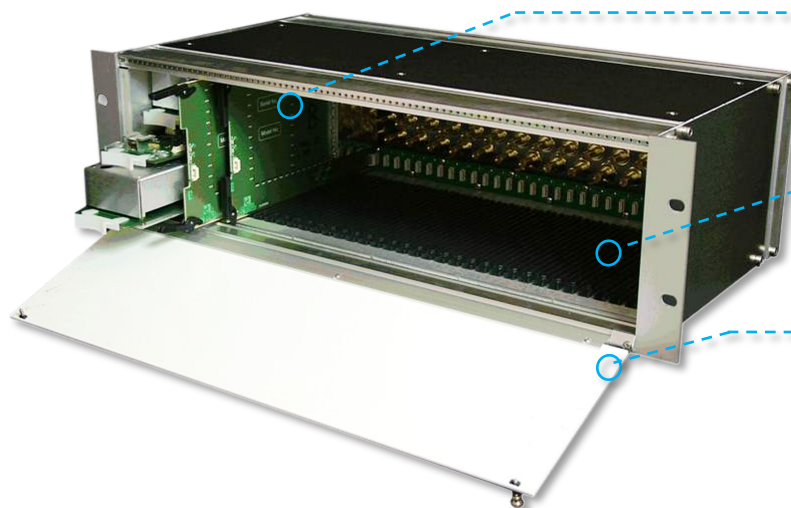


**850 - 2150 MHz** operating frequency range.

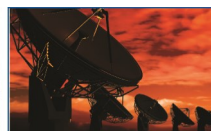
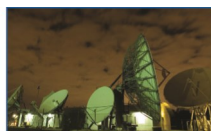
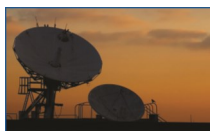


### Remote control & monitoring

via RJ45 Ethernet port with SNMP & web browser interface



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





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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		$x \pm 1$ dB		$x=0$ 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		50 $\Omega$ SMA	50 $\Omega$ BNC	75 $\Omega$ BNC	75 $\Omega$ F-type
Flatness	850-2150MHz	$\pm 0.75$ dB	$\pm 1.0$ dB	$\pm 1.8$ dB	$\pm 2.0$ dB
	Any 36MHz	$\pm 0.45$ dB	$\pm 0.70$ dB	$\pm 1.2$ dB	$\pm 1.4$ 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)

