ETL Systems
Excelling in RF Engineering

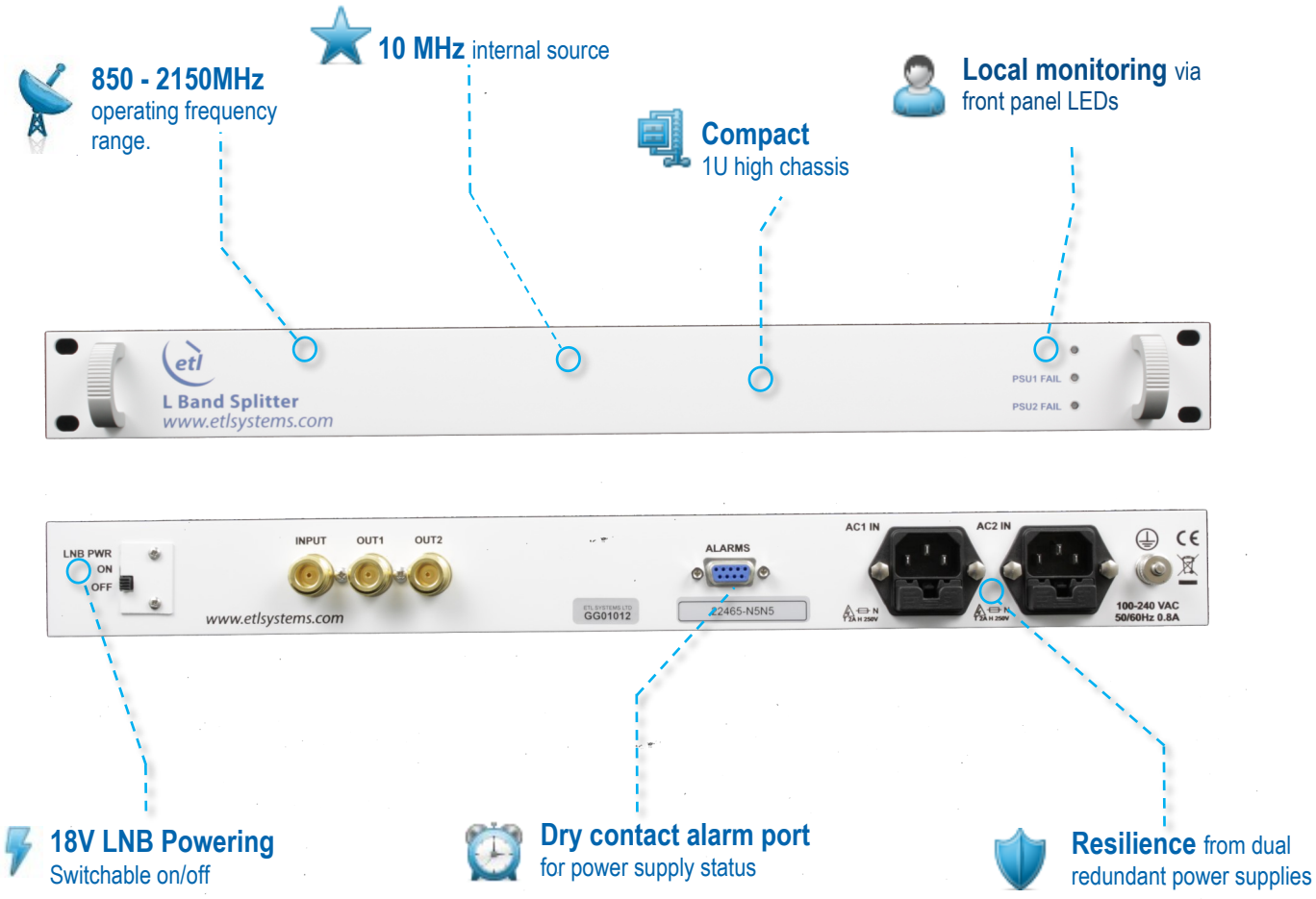
Model Number:
22465-XXXX

2 Way Active Splitter with LNB Powering and 10MHz Source

ETL's 22465 is a 2-Way Active Splitter shelf with an internal 10MHz source. The unit is designed for use in signal distribution systems in the L-Band range 850-2150MHz, featuring nominal 1dB gain and switchable LNB power.

Typical applications:

- Satellite operators, VSAT, teleports & broadcasters.
- IPTV & DTH headend content distribution.
- High resilience RF distribution where optimum satellite signal quality is required.
- SNG & Outside Broadcast Trucks.



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Technical specifications and operating parameters

RF Parameters							
Capacity		2-way Splitter					
Input & output ports		50Ω BNC, SMA, N-type. 75Ω F-type, BNC					
Frequency Range		850—2150MHz					
Connector & impedances		50Ω SMA	50Ω N-type	50Ω BNC	75Ω BNC	75Ω F-type	
Gain		1±2.0		Mean across frequency band			
Gain Flatness (dB)	Full band	±1.00	±1.00	±1.00	±1.20	±1.25	
	Any 36MHz	±0.35	±0.35	±0.35	±0.50	±0.50	
Input Return Loss (dB)	Typ.	15	15	15	12	12	
	Min	10	10	10	9	8	
Output Return Loss (dB)	Typ.	18	18	18	12	12	
	Min	10	10	10	9	8	
L Band Output 1dB GCP	Typ.	+5 dBm					
	Min.	+3.6 dBm					
Group Delay Variation	Full band	2 ns maximum					
	Any 36MHz	1 ns maximum					
Isolation	Typ.	24dB	24dB	24dB	24dB	23dB	
	Min	20dB	20dB	20dB	20dB	19dB	
Noise Figure		7 dB					
Input RF Power		16dBm		Absolute maximum			

Control, Monitoring & Power		
PSU Power	85-264Vac 50-60Hz	Fused 2A
PSU Redundancy	Dual redundant and alarmed	Diode OR, Not hot-swap. Dual IEC inlets
Alarms	Dry contact, change-over via 9-way D-type. Available alarms are: PSU.	Rear Panel
AC Consumption	<30W	Maximum consumption at steady state
LNB Power	18Vdc, 500mA max via common (RF in) port	
Display	LED display to indicate PSU status.	

Environmental	
Operating Temperature	0 to 50˚C
Location	Indoor use only
Storage Temperature	-20˚C to +75˚C
Humidity	85% non-condensing
Altitude	10,000 feet AMSL (above mean sea level)

10MHz Source					
10MHz Reference Source	Internal (Injected onto common port)				
Frequency	10MHz (Factory setting is to ± 1ppm, ± 10Hz)				
Output Level	5 ± 2 dBm				
Output Type	Sine Wave				
Harmonic & Spurii Levels	2nd Harmonic Level: <- 60 dBc (typically 70 dBc)		3rd Harmonic Level: <- 55 dBc (typically 60 dBc)		All other spurii: <- 65 dBc
Internal Reference	10 MHz Sine Wave OCXO				
Frequency Stability over temperature	± 5 x 10^{-9} (0 to +55°C)				
Reference Source Ageing	± 5 x 10^{-8} / year				
Reference Source Phase Noise	< -95 dBc/ Hz @ 1Hz	< -125 dBc/ Hz @ 10Hz	< -145 dBc/ Hz @ 100Hz	< -150 dBc/Hz @ 1kHz	< -155 dBc/ Hz @ 10kHz
Warm up time	< 3 min at 25°C to within accuracy of < ± 2 x 10^{-8}				

Physical		
Dimensions	1U high x 350mm deep x 19" wide 19" rack mountable	
Weight	3.1Kg	Excluding packaging
Colour	RAL9003 White (semi-matte)	

Note 1: Typical parameters are guide figures and measured data may deviate from the quoted figures. ETL endeavours to exceed the quoted typical parameters where practically possible.
Note 2: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage. For reliable long term operation do not exceed the parameters given in above.

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