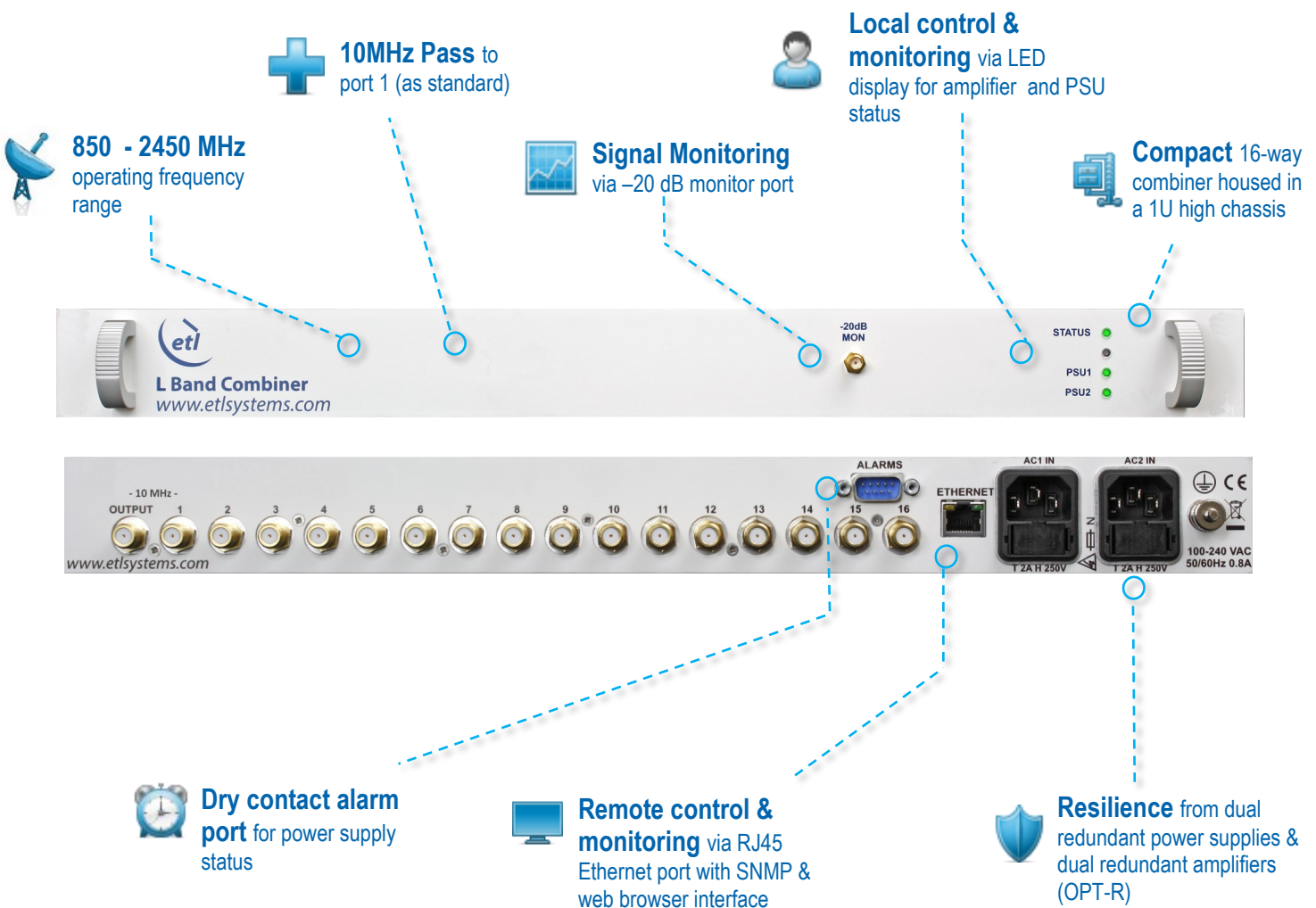# 16-Way Single L-Band Active Dextra Series Combiner

with 10MHz pass to port 1, dual redundant amplifiers (OPT-R) & DC pass to port 1 (OPT-D)

Typical applications:
- Satellite operators, VSAT, teleports & broadcasters
- High resilience RF distribution, & optimum satellite signal quality

10MHz Pass to port 1 (as standard)

Local control & monitoring via LED display for amplifier and PSU status

850 - 2450 MHz operating frequency range

Signal Monitoring via –20 dB monitor port

Compact 16-way combiner housed in a 1U high chassis

etl
L Band Combiner
www.etlsystems.com

-20dB MON

STATUS
PSU1
PSU2

- 10 MHz -
OUTPUT 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

ALARMS ETHERNET AC1 IN AC2 IN

www.etlsystems.com

T 2A H 250V   T 2A H 250V

100-240 VAC
50/60Hz 0.8A

Dry contact alarm port for power supply status

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

Resilience from dual redundant power supplies & dual redundant amplifiers (OPT-R)

Technical specifications and operating parameters

RF Parameters				
Capacity	16-way Combiner			
Frequency	850 to 2450MHz			
Front Panel Monito	50Ω SMA			
RF Connector & Impedances	50Ω BNC	50Ω SMA	75Ω F-Type	75Ω BNC
Gain (dB)	0±1.0 Mean across band			
Gain flatness — Full band	±0.8 dB	±0.8 dB	±1.0 dB	±1.0 dB
Gain flatness — Any 36MHz	±0.25 dB	±0.25 dB	±0.3 dB	±0.3 dB
Input Return Loss — Typical	21 dB	21 dB	21 dB	21 dB
Input Return Loss — Minimum	14 dB	14 dB	14 dB	14 dB
Output Return Loss — Typical	20 dB	20 dB	20 dB	20 dB
Output Return Loss — Minimum	14 dB	14 dB	14 dB	14 dB
Group Delay Variation — Full band	2 ns maximum			
Group Delay Variation — Any 36MHz	1 ns maximum			
Amplification	Single path amplifier (standard model)			
Options — OPT-R	Dual redundant amplifier Selectable hot or cold standby, 1:1 redundancy with auto switch-over based on amplifier current monitoring.			
Options — OPT-D	DC Pass port 1 to common port			
Options — OPT-RD	Dual redundant amplifier and DC pass port 1			
10MHz Insertion Loss	<2dB			
Isolation 850-2250MHz — Typical	28 dB	28 dB	28 dB	28 dB
Isolation 850-2250MHz — Minimum	24 dB	24 dB	24 dB	24 dB
Isolation 2250-2450MHz — Typical	28 dB	28 dB	24 dB	24 dB
Isolation 2250-2450MHz — Minimum	24 dB	24 dB	22 dB	22 dB
Noise Figure	25 dB			
Output 1dB GCP	+10 dBm			
OIP3	+20 dBm			
OIP2	+40 dBm			
3rd Order intermodulation level	-40 dBc		With 2 equi-magnitude -13dBm carriers. Total power -10dBm.	
Input RF Power	16 dBm		Absolute maximum	
In Band Spurious	< -80dBm			

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

Power		
PSU Power	85-264Vac 50-60Hz	Fused 2A
LNB Power	None	
PSU	Dual redundant with dual IEC inlets.	Diode OR. Not hot-swap
AC Consumption	<20W	At steady state

System Control & Alarms	
Alarms	Dry contact, change-over via 9-way D-type. Available alarms are: PSU supply. Full status and alarms are also available via the Ethernet interface.
Remote Control and Monitoring	Via RJ45 port with 10baseT/100baseTX Ethernet offering web browser access SNMP, and ETL Proprietary TCP Protocol
Display	Tri coloured LEDs to indicate PSU and amplifier status.

Physical	
Dimensions	1U high x 350mm deep x 19" wide
Weight	3.05 kg
Colour	RAL9003- White (semi-matte)

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.