

# 8-way Single L-band Active Dextra Series Combiner

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

850-2450MHz

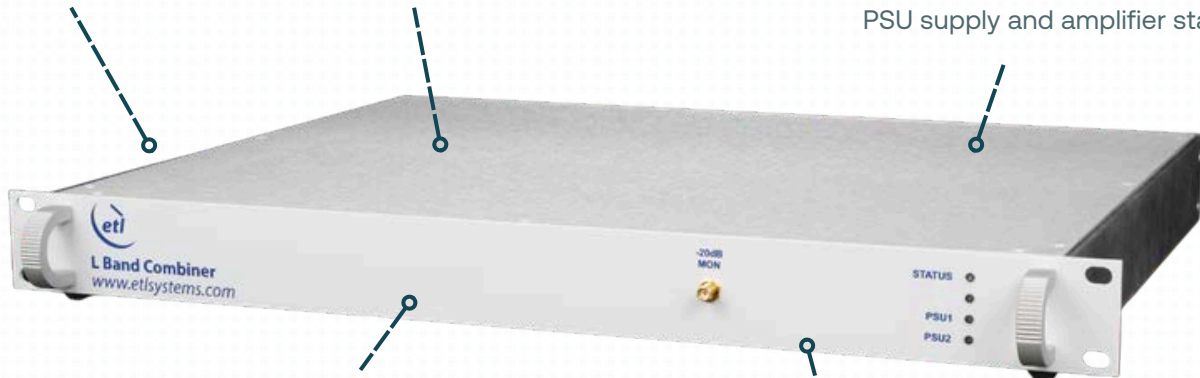
operating frequency range. Ka-band ready

10MHz Pass

on port 1 only

Local Monitoring

via front panel status LEDs for PSU supply and amplifier status



Signal Monitoring

via -20 dB monitor port to measure input signals

DC Pass Option

port 1 to common port  
(Optional: OPT-D)

Compact

housed in a 1U high chassis



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  
(Optional: OPT-R)

| RF Parameters                               |           |                                                                                                                                         |          |                                                           |         |
|---------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------------------------------------------|---------|
| Capacity                                    |           | 8 way combiner                                                                                                                          |          |                                                           |         |
| Frequency Range                             |           | 850 to 2450MHz (Extended L-band)                                                                                                        |          |                                                           |         |
| Front Panel Monitor                         |           | 50Ω SMA                      -20 dB, 16 dB return loss                                                                                  |          |                                                           |         |
| Rf Connector & impedances                   |           | 50Ω BNC                                                                                                                                 | 50Ω SMA  | 75Ω F-Type                                                | 75Ω BNC |
| Gain                                        |           | 0±1.0 dB Mean across band                                                                                                               |          |                                                           |         |
| Gain Flatness                               | Full band | ±0.8 dB                                                                                                                                 | ±0.8 dB  | ±1.0 dB                                                   | ±1.0 dB |
|                                             | Any 36MHz | ±0.25 dB                                                                                                                                | ±0.25 dB | ±0.25 dB                                                  | ±0.3 dB |
| Input Return Loss                           | Typical   | 21dB                                                                                                                                    | 21dB     | 21dB                                                      | 21dB    |
|                                             | Minimum   | 16db                                                                                                                                    | 16dB     | 16db                                                      | 16dB    |
| Output Return                               | Typical   | 20dB                                                                                                                                    | 20dB     | 20dB                                                      | 20dB    |
|                                             | Minimum   | 16dB                                                                                                                                    | 16dB     | 16dB                                                      | 16dB    |
| Group Delay Variation                       | Full Band | 2 ns Maximum                                                                                                                            |          |                                                           |         |
|                                             | Any 36MHz | 1 ns Maximum                                                                                                                            |          |                                                           |         |
| Amplification                               |           | Single path amplifier (standard model)                                                                                                  |          |                                                           |         |
| Options                                     | OPT-R     | Dual redundant amplifier<br>Selectable hot or cold standby, 1:1 redundancy with auto switch-over based on amplifier current monitoring. |          |                                                           |         |
|                                             | OPT-D     | DC Pass port 1 to common port                                                                                                           |          |                                                           |         |
|                                             | OPT-RD    | Dual redundant amplifier and DC pass port 1                                                                                             |          |                                                           |         |
| 10MHz Insertion Loss                        |           | <1dB      Port 1 to common only                                                                                                         |          |                                                           |         |
| 10MHz Rejection                             |           | >50dB      Ports 2 to 8                                                                                                                 |          |                                                           |         |
| Isolation 850-2250MHz                       | Typical   | 28db                                                                                                                                    | 28dB     | 28dB                                                      | 28dB    |
|                                             | Minimum   | 24dB                                                                                                                                    | 24dB     | 24dB                                                      | 24dB    |
| Isolation 2250-2450MHz                      | Typical   | 28db                                                                                                                                    | 28dB     | 24dB                                                      | 24dB    |
|                                             | Minimum   | 24dB                                                                                                                                    | 24dB     | 22dB                                                      | 22dB    |
| Noise Figure                                |           | 24dB                                                                                                                                    |          |                                                           |         |
| Output 1dB GCP                              |           | +10dBm                                                                                                                                  |          |                                                           |         |
| OIP3                                        |           | +20 dBm                                                                                                                                 |          |                                                           |         |
| OIP2                                        |           | +30dBm                                                                                                                                  |          |                                                           |         |
| 3 <sup>rd</sup> Order intermodulation level |           | -40 dBc                                                                                                                                 |          | With 2 equi-magnitude -13dBm carriers. Total power -10dBm |         |
| Input RF Power                              |           | 16 dBm                                                                                                                                  |          | Absolute maximum                                          |         |
| In Band Spurious                            |           | Non-signal related < -80 dBm<br>Signal related < 60dBc                                                                                  |          |                                                           |         |
| Enviromental                                |           |                                                                                                                                         |          |                                                           |         |
| Temperature                                 |           | 0 to 50°C Operating                                                                                                                     |          | -20°C to +75°C Storage                                    |         |
| Location                                    |           | Indoor use only                                                                                                                         |          |                                                           |         |
| Humidity                                    |           | 85% non-condensing. Relative Humidity.                                                                                                  |          |                                                           |         |
| Altitude                                    |           | 10,000 feet AMSL                                                                                                                        |          |                                                           |         |

| Physical                      |                                                                                                                                                    |                           |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Weight                        | 3.05Kg                                                                                                                                             |                           |
| Dimensions                    | 1U high x 350mm deep x 19" wide                                                                                                                    |                           |
| Colour                        | RAL9003- White (Semi-Matte)                                                                                                                        |                           |
| Power                         |                                                                                                                                                    |                           |
| PSU Power                     | 85-264Vac 50-60Hz                                                                                                                                  | Fused 2A                  |
| PSU                           | Dual redundant with dual IEC inlets.                                                                                                               | Diode OR.<br>Not hot-swap |
| AC Consumption                | <20W                                                                                                                                               | At steady state           |
| System Control & Alarm        |                                                                                                                                                    |                           |
| 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.                                                                                            |                           |

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.