



Model Number: **D0104S1ULA-22410**

RF Engineering  
and Custom Build

# 4-way Single L-band Active Dextra Series Splitter

With dual redundant amplifiers (OPT-R version), switchable LNB powering & -20 dB monitoring port



The **Dextra** splitter range has been designed for high resilience RF distribution, and optimum satellite signal quality. The splitters benefit from excellent RF performance and compact form factor as well as advanced functionality.

### Typical applications:

- Satellite operators, VSAT, teleports, and broadcasters
- High resilience RF distribution, and optimum satellite signal quality
- 850-2450 MHz to cover **Ka-band and HTS applications**

### Benefits & features:

- Highly resilient solution minimising the risk of expensive downtime for the satcoms user
- Dual redundant power supplies
- LNB current monitoring
- Dual redundant amplifiers (option)

### Advanced functionality:

- 0/13/18V LNB powering ( $\pm 22$  KHz tone)
- LNB current monitoring
- Customer settable alarm thresholds for LNB current
- Dual redundant amplifiers (option)
- 20 dB monitor port on the front panel
- Web browser access (and SNMP) for control and monitoring
- Compact 1RU 19" chassis

### RF performance:

- Specified to **ensure optimum signal quality** with high throughput / high bandwidth satcoms.
- 850-2450 MHz operating range
- Excellent Gain flatness (frequency response)
- High return loss
- High linearity
- Low noise figure

**Options:** Dextra splitters can be specified with single amplifier or hot/cold-standby dual-redundant amplifier options. Please specify OPT-R for redundant amplifier option. This is remote configurable. The range covers 4-way and 8-way splitters and combiners in both single and dual configurations. 16-way splitters and combiners are available as single units. All these are supplied in a 1RU case for space efficient rack mounting.





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Technical specifications and operating parameters

### Preliminary Specification

#### RF Parameters

Capacity	4-way Splitter					
Front panel monitor	50Ω SMA	-20dB, 16dB return loss				
Frequency	850-2450MHz					
Connector & impedances	50Ω BNC	50Ω SMA	50Ω N-type	75Ω F-type	75Ω BNC	
Gain Flatness	850-2450 MHz	±0.8 dB	±0.8 dB	±0.8 dB	±1.0 dB	±1.0 dB
	Any 36 MHz	±0.25 dB	±0.25 dB	±0.25 dB	±0.3 dB	±0.3 dB
Input return loss	Typ.	20 dB	20 dB	20 dB	20 dB	20 dB
	Min	16 dB	16 dB	16 dB	16 dB	16 dB
Output return loss	Typ.	21 dB	21 dB	21 dB	21 dB	21 dB
	Min	16 dB	16 dB	16 dB	16 dB	16 dB
Gain	0 ± 1.0 dB		Mean across band			
Group Delay	850-2450 MHz	2 ns maximum				
	Any 36 MHz	1 ns maximum				
Amplifier Redundancy (Option OPT-R)	Dual redundant amplifier. Selectable hot or cold standby, 1:1 redundancy with auto switch over based on amplifier current monitoring.					
Isolation	25 dB	Min. Between any two output ports				
Noise figure	50Ω	10 dB				
	75Ω	12 dB				
Output 1dB GCP	+5 dBm					
OIP3	+10 dBm					
OIP2	+30 dBm					
3rd order intermodulation level	-40 dBc	With 2 equi-magnitude -13dBm carriers. Total power -10dBm.				
In Band Spurious	<-80 dBm					

#### Physical

Dimensions	1U high x 350mm deep x 19" wide
Weight	3 Kg
Colour	White 00-E-55 semi-gloss

#### Power

AC Power	85-264Vac 50-60Hz	Fused 2A
AC Consumption	<20W	At steady state. With max rated LNB current supplied
Input RF Power	16dBm	Absolute maximum
LNB Power	0/13V/18Vdc, 500mA via common (RF in) port, over current protected at 800mA typical. 22kHz tone on/off Ethernet port remote setting of LNB voltage and 22KHz tone; and LNB current alarm threshold.	
PSU	Dual redundant PSUs with dual IEC inlets.	Diode OR
Hot-swap PSU	No	

#### System Control

Monitoring & Remote Control	Redundant amplifiers, LNB current and power supplies monitored via RJ45 port with 10baseT/100baseTX Ethernet offering web browser access, SNMP and ETL proprietary TCP protocol	
Alarms	Dry contact, 9-way D-type alarm port for PSU and LNB supply. Full status and alarms are also available via the Ethernet interface.	
Display	Front panel LEDs for PSU, LNB and amplifier status.	

#### Environmental

Operating temperature	0 to 50°C
Location	Indoor use only
Storage temperature	-20°C to +75°C
Humidity	85% non-condensing

#### Options

Please add the relevant suffix to the model number to indicate your required connectors:

BNC 50 Ω - B5B5  
 BNC 75 Ω - B7B7  
 N-type 50 Ω - N5N5  
 F-type 75 Ω - F7F7  
 SMA 50 Ω - S5S5

Please use suffix **OPT-R** to specify the option of dual redundant amplifiers

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