16-way Single L-band Active Dextra Series Combiner

With dual redundant amplifiers (OPT-R version) & -20 dB monitoring port

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

Advanced functionality:
- 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

Benefits & features:
- Highly resilient solution minimising the risk of expensive downtime for the satcoms user
- Dual redundant power supplies
- Dual redundant amplifiers (option)

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**

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

Options: Dextra combiners 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 combiners and splitters 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.

Model Number: C1601S1ULA-22422

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Technical specifications and operating parameters

RF Parameters

Capacity	16-way Combiner			
Front panel monitor	50Ω SMA		-20dB, 16dB return loss	
Frequency	850-2450MHz		Extended L-Band	
Connector & impedances	50Ω BNC	50Ω SMA	75Ω F-type	75Ω BNC

Gain Flatness	Full band	±0.8 dB	±0.8 dB	±1.0 dB	±1.0 dB
	Any 36 MHz	±0.25 dB	±0.25 dB	±0.4 dB	±0.4 dB
Input return loss	Typical	21 dB	21 dB	21 dB	21 dB
	Minimum	16 dB	16 dB	16 dB	16 dB
Output return loss	Typical	20 dB	20 dB	20 dB	20 dB
	Minimum	16 dB	16 dB	16 dB	16 dB
Gain		0 ± 1.0 dB		Mean across band	
Group Delay Variation	Full band	2 ns maximum			
	Any 36 MHz	1 ns maximum			
Amplification		Single path amplifier			
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* 850-2250MHz	Typical	28 dB	28 dB	28 dB	28 dB
	Minimum	24 dB	24 dB	23 dB	23 dB
Isolation* 2250-2450MHz	Typical	28 dB	28 dB	24 dB	24 dB
	Minimum	24 dB	24 dB	22 dB	22 dB
Noise figure		25 dB			
Output 1dB GCP		+10 dBm			
OIP3		+20 dBm			
OIP2		+30 dBm			
3rd order intermodulation level		-40 dBc	With 2 equi-magnitude –13dBm carriers. Total power -10dBm.		
In Band Spurious		<-80 dBm			

Minimum between any two output ports

Power

PSU Power	85-264Vac 50-60Hz	Fused 2A
AC Consumption	<20W	At steady state.
Input RF Power	16dBm	Absolute maximum
PSU Redundancy	Dual redundant PSUs with dual IEC inlets.	Diode OR
Hot-swap PSU	No	

System Control

Monitoring & Remote Control	Redundant amplifiers 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. PSU supply failure alarm. Full status and alarms are also available via the Ethernet interface.
Display	Tricolour LEDs to indicate PSU supply and amplifier status (Front Panel)

Environmental

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

Physical

Dimensions	1U high x 350mm deep x 19" wide (19" rack mountable)
Weight	3.05 Kg
Colour	White 00-E-55 semi-gloss

Connector Options

Please add the relevant suffix to the model number to indicate your required connectors:
BNC 50 Ω - B5B5
BNC 75 Ω - B7B7
F-type 75 Ω - F7F7
N-type 50 Ω - N5N5
SMA 50 Ω - S5S5

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

RoHS COMPLIANT Pb

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