



# 16 way L-band Combiner

## With single output and hot swap, front mounted dual redundant amplifiers

Model C1601S1ULA-22532-12 is a 16 input / 1 output active Combiner, with hot swap front mounted amplifiers and PSUs in a 1:1 redundancy configuration with automatic/manual changeover. The 16-way L-band Combiner also offers gain and slope control. The range is also available with a choice of amplifiers offering low noise to high linearity options.

Unit supplied with modules, as per specification table.

**Typical applications:**

- Satellite operators, VSAT, teleports and broadcasters
- High resilience RF distribution where optimum satellite signal quality is required
- Teleports with limited rack space

**Local control & monitoring** via front panel push buttons & display

**Resilience** from dual redundant power supplies, accessible from the front panel

**850 - 2150 MHz**  
L-band operating frequency range.

**1:1 redundancy** configuration with automatic/manual changeover for reliability



Photos are for representative purposes only



**Variable slope compensation** 0-4dB

**Dry contact alarm port** for amplifier & power supply status

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

**Compact** housed in a 1U high chassis





**Technical specifications and operating parameters**

RF Parameters							
Capacity	16 way combiner		Single output				
Frequency Range	850-2150 MHz (L-band)						
Gain (dB)	Maximum	27 ± 2					
	Minimum	-2 ± 2					
Slope range (dB)	0 to 4						
Slope settings (dB)	1±0.25 dB		Mean slope				
RF Connectors	50Ω SMA	50Ω BNC	75Ω BNC	75Ω F-type			
Gain Flatness	Full band	±1.50 dB	±1.50 dB	±1.50 dB	±1.50 dB		
	Any 36MHz	±0.25 dB	±0.25 dB	±0.5 dB	±0.5 dB		
Input Return Loss	Typical	18 dB	18 dB	12 dB	12 dB		
	Minimum	14 dB	14 dB	8 dB	8 dB		
Output Return Loss	Typical	18 dB	18 dB	12 dB	12 dB		
	Minimum	14 dB	14 dB	8 dB	8 dB		
Isolation (dB)	>22 between RF ports						
Noise Figure	Typical	28 dB		At max gain setting. Any 1 input port routed to output, all other ports terminated.			
	Max	30 dB					
1dB GCP (dBm)	Typical	16		At max gain and 0dB slope setting			
	Minimum	14					
OIP3 (dBm)	≥ +33						
OIP2 (dBm)	Typical	+45					
	Minimum	+43					
Max Input Level	+30 dBm						
In band, signal independent spuri	Min Gain < -85dBm Max Gain < -65dBm						

Environmental	
Operating temperature	0 to 55°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

Power		
PSU Power	85-264Vac 50-60Hz	Fused 2A
AC Consumption	<50W	Max. consumption at steady state
LNB Power	None	
PSU	Dual redundant	Dual IEC inlet
Hot-swap PSU	Yes	
RF Monitoring	None	

System Control	
Local Control	Via Front Panel LCD and push buttons
Remote Control	Via RJ45 Ethernet port 10BaseT/100BaseTx. TCP/IP, SNMP & Web browser interface.
Alarms	Dry contact, change-over via 9-way D-type on summary alarm. Ethernet (RJ45) for PSU & Amp. status

Physical	
Dimensions	1U high x 550mm deep x 19" wide
Weight	4.5 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.

