



Model Number: **C0801S1ULA-22242-N5N5**

8-way L-band Active Combiner

with dual redundant amplifiers and internal 10 MHz source



This single 8-way L-band active combiner benefits from automatic, cold standby, dual redundant amplifiers on the input providing unity gain, with switch-over based on amplifier current monitoring.

Front View of similar 8-way Combiner

An LED on the front panel signifies amplifier status. The unit also features 10MHz injection, either from an internal 10MHz reference source or via an external supply.



Rear View of similar 8-way Combiner

The combiner is fitted with dual redundant power supplies, which are monitored by LED's on the front panel and via a dry contact alarm port on the rear.





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RF Engineering and Custom Build

Technical specifications and operating parameters

RF Parameters		
Capacity	16-way	
Frequency Range	850-2150 MHz (L-band)	
Gain	0 dB \pm 2 dB nominal, mean across band	
Flatness	850-2150 MHz	\pm 1.0 dB
	Over any 36MHz	\pm 0.5 dB
1dB Compression	12 dBm output power level	
Noise Figure	10 dB	
Input Return Loss	18 dB typical	
Output Return Loss	14 dB typical	
Amp Redundancy	1-to-1 redundant	Cold redundancy & current sensing
Internal Reference	10MHz Sine Wave	Ovenised Crystal Oscillator
10MHz Output Level	+10 dBm \pm 2 dB	
Frequency Stability	\pm 1 x 10 ⁻⁸	0 to +55°C
Reference Source Ageing	\pm 5 x 10 ⁻⁸ / year	
	\pm 5 x 10 ⁻¹⁰ / day	
Reference Source Phase Noise	<-85 dBc / Hz @ 1Hz	
	<-115 dBc / Hz @ 10Hz	
	<-140 dBc / Hz @ 100Hz	
	<-150 dBc / Hz @ 1000Hz	
	<-155 dBc / Hz @ 10000Hz	
Warm up time	< 2 minutes	At 25°C to within \pm 1 x 10 ⁻⁷
10MHz Ref Source	U-link on rear panel to select internal/external. The 10MHz reference is injected onto the common L-band port	Two 50ohm BNC's on the rear panel for 10MHz external IN & internal OUT, with a U-Link supplied. There is no 10MHz injection if the U-Link is removed & the port is terminated (i.e. no external source supplied)

Physical	
Input Connector	N-type
Input Impedance	50Ω
Output Connector	N-type
Output Impedance	50Ω
Dimensions	2U high x 350mm deep x 19" wide
Weight	8 kg
Colour	White 00-E-55 semi-gloss

System Control	
Display	Front panel LED's for amplifier & PSU status
Alarms	Dry contact alarm port on rear panel for PSU failure

Power	
LNB Power	None
AC Power	85-264Vac 50/60Hz Fused 2A
PSU	Dual redundant
Hot-swap PSU	No

Environmental	
Operating temperature	0 to 45°C
Location	Indoor use only
Storage temperature	-20°C to +75°C
Humidity	85% non-condensing

Key Features	
Dual redundant amplifiers	
10MHz Reference	
Dual redundant power supplies	

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