

Model Number: C1601S2ULA-22226-S5S5

16-way L-band Active Combiner

with dual redundant amplifiers & 10MHz source



This single L-band active combiner benefits from automatic, cold standby and dual redundant amplifiers on the input providing unity gain, and dual redundant power supplies for reliability in service.

Front View of Model C1601S2ULA-22226-S5S5

Front panel LED's offer a visual status of the amplifiers and power supplies and a dry contact alarm port is provided on the rear panel for external monitoring.

The unit also features 10MHz injection, either from an internal 10MHz reference source or via an external supply.



Rear View of Similar Model

This particular unit has 50 ohm SMA connectors, but other impedances and connector types are available (model numbers will vary).

This unit is also available with Ethernet monitoring (see Model C1601S2ULA-22226-S5S5 -E)

















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RF Engineering and Custom Build

Technical specifications and operating parameters

| | RF P | arameters | | |
|--------------------------------------|--------------------|---|---|--|
| Capacity | | 16-way | | |
| Frequency Range | | 850-2150 MHZ (L-band) | | |
| Gain | | 0 dB ± 2 dB no | minal, mean | |
| Flatness | 850-2150MHz | ± 1.5 dB | | |
| | Over any 36MHz | ± 0.5 dB | | |
| 1dB Compr | 1dB Compression | | | |
| Noise Figure | Noise Figure | | 10 dB | |
| Input Return Loss | | 18 dB typical | | |
| Output Ret | urn Loss | 15 dB typical | | |
| Amp Redundancy | | 1-to-1 redundant | Cold redundancy & current sensing | |
| Internal Ref | Internal Reference | | Ovenised Crystal Oscillator | |
| 10MHz Output Level | | +10 dBm ± 2 dB | | |
| Frequency Stability over temperature | | ± 1 x 10-8 | 0 to +55°C | |
| Reference | Source Ageing | ± 5 x 10 ⁻⁸ / year | | |
| | | ± 5 x 10 ⁻¹⁰ / year | | |
| | Source Phase | <-85 dBc / Hz @ 1Hz | | |
| Noise | | <-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 <± 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 50 ohm BNC's on rear panel for 10MHz external IN and internal OUT, with a U-Link supplied. There is no 10MHz injection if the U-Link is removed and the port is terminated (i.e. no external source supplied) | |

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

| System Control | |
|----------------|---|
| Display | Front panel LED's for PSU & Amplifier status |
| Alarms | Dry contact alarm port on ear panel for PSU failure |

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

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

| Key Features | |
|--|--|
| Dual redundant amplifiers | |
| 10MHz reference source | |
| Dual redundant power supplies | |
| Alarm contacts for external monitoring | |

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