

## ACTIVE COMBINER / SPLITTER

The Active Combiner/Splitter is available for several frequency ranges: L-Band, S-Band, C-Band, X-Band and Ku-Band. Standard is the C-Band from 3.4-4.2GHz. Both the Splitter and Combiner can be supplied as a 2, 4 or 8 way type with N connectors (SMA connector is optional). Input power protection up to 1 Watt. The overall gain across the band is >15dB.

### FEATURES

- Wideband output
- Up to 1 Watt of NO DAMAGE input power level protection
- >55 dB of isolation
- Overall gain of >15dB across the band

### APPLICATION

- Satellite Communication
- Weather Radar
- Automatic Test Equipment signal source
- Civil Aviation Radar
- Defense application
- Broadcast

### Electrical Specification (general):

| Parameter                                | Specification | Units |
|--|---------------|-------|
| Frequency range                          | 3.4 - 4.2     | GHz   |
| Number of inputs                         | 1             | -     |
| Number of outputs *                      | 4             | -     |
| P1 dB **                                 | >10           | dBm   |
| Noise figure                             | <4            | dB    |
| Gain                                     | 15            | dB    |
| Gain flatness across the band            | ±0.5          | dB    |
| Port to port isolation                   | >55           | dB    |
| Isolation between output ports           | >55           | dB    |
| NO DAMAGE input level                    | >2            | Watts |
| Input/Output return loss across the band | >18           | dB    |
| Input Power detector                     | > -30         | dBm   |
| Mean Time Between Failure (MTBF)         | 50,000        | Hours |

#### Notes:

\* Output/Input ports available in 2, 4, 8 format

\*\* Higher P1 dB option available up to 1 W



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### Physical Specification:

|                          |               |         |
|--------------------------|---------------|---------|
| <b>Output connectors</b> |               | N-Type  |
| <b>Output impedance</b>  |               | 50Ω     |
| <b>Input connector</b>   |               | N-type  |
| <b>Input impedance</b>   |               | 50Ω     |
| <b>Dimension</b>         | <b>Width</b>  | 150mm.  |
|                          | <b>Height</b> | 30mm.   |
|                          | <b>Depth</b>  | 110mm.  |
| <b>Weight</b>            |               | <90 gms |

### Environmental Specification:

|                                    |                     |
|------------------------------------|---------------------|
| <b>Operating temperature range</b> | -20 to 75°C         |
| <b>Location</b>                    | Indoor use only     |
| <b>Humidity</b>                    | -85% non-condensing |
| <b>Storage temperature</b>         | -40 to +85°C        |

Active Combiner/Splitter



#### Options available:

- Impedance: 75Ω (standard 50Ω)
- SMA type connector (standard N-type connector)
- Splitter: 2, 8 way (standard 4 way - 1 to 4)
- Combiner: 2, 8 way (standard 4 way - 4 to 1)

#### Available Bands:

- L-Band from 950 - 1750MHz
- S-Band from 2.0 - 2.4GHz
- C-Band from 3.4 - 4.2GHz (standard)
- X-Band from 7.25 - 7.75GHz
- Ku-Band from 10.95 - 12.75GHz

Data sheet is for information purposes only and may be subject to modifications or may be discontinued without notice. **Rev. 1 dated 02-01-2015**