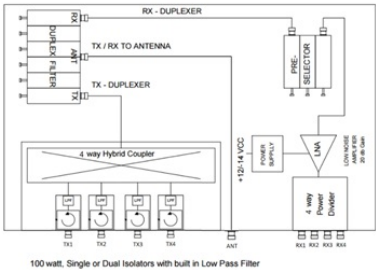


HCMR150-4-DUPT

Hybrid 4 channel VHF TX/RX Combiner and Duplex Filter HS

HCMR150-4-DUPT series is a VHF TX/RX hybrid combiner and duplexer with single or dual isolators used for combining 4 VHF transceivers into one antenna with close frequency spacing.

- Standard EIA 19" trays.
 - Two of 2HU, 400 mm depth
 - One of 1HU, 300 mm depth
- Tuned to customer specified frequencies, need to be specified when ordering.
- Full bandwidth.
- 100 W power handling.
- Combiner with high spec. external duplexer.



ELECTRICAL SPECIFICATIONS

| | |
|---------------------|------------------------------------------------------------------|
| Type | Hybrid 4 channel VHF TX/RX Combiner and Duplex Filter HS |
| Frequency | 144 - 162 MHz 158 - 175 MHz |
| VSWR | ≤ 1.5:1 |
| Impedance | 50 Ohm |
| Max. Input Power | 100 Watts (Per channel) |
| Insertion Loss (TX) | Single isolator: < 8.6 dB Dual isolator: < 8.9dB |
| TX-TX spacing | DUPT-5: ≤ 1.5 MHz DUPT-10: ≤ 2.0 MHz |
| TX-RX spacing | DUPT-5: 4 - 7 MHz DUPT-10: 8 -12 MHz |
| Isolation RX-TX | TX-TX spacing <0.4 MHz :> 90dB TX-TX spacing <2.0 MHz :> 70dB |
| Isolation TX-RX | RX-RX spacing <0.4 MHz :> 90dB RX-RX spacing <2.0 MHz :> 70dB |
| Isolation TX - TX | Single isolator: > 50 dB Dual isolator: > 70 dB |
| Isolation RX-RX | >20 dB |
| Bandwidth (RX) | Approx. 3 MHz (in band) |
| Gain | RX: 20±1.0 dB |
| LNA Noise Figure | < 2.0 dB |
| Power Supply | 100-240 V; 50/60 Hz (Max. 7W) |

Datasheet

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MECHANICAL SPECIFICATIONS

| | |
|-----------------------|------------------------------------------------------------------------------------------|
| Color | Black Grey (RAL7021) |
| Dimension | Two units: 482.6 x 89.0 x 300 mm (W x H x L) One unit: 482.6 x 44.5 x 300 (W x H x L) |
| Weight | Single isolator: 10.3 kg Dual isolator: 11.9 kg |
| Connector | Type N-female |
| Serial no. | On product label |
| Operating temperature | -20° to +60°C |

ORDERING INFORMATION

| | |
|-----------|-----------------------------------------------------------------------------------------------|
| 55142-113 | HCMR150-4S-L-5-150 144-162 MHZ 4CH x 100 W Single Isolator + DUPT-5 2 x 2HU + 1 x 1HU |
| 55144-123 | HCMR150-4S-L-10-150 144-162 MHZ 4CH x 100 W Single Isolator + DUPT-10 2 x 2HU + 1 x 1HU |
| 55142-133 | HCMR150-4S-H-5-150 158-175 MHZ 4CH x 100 W Single Isolator + DUPT-5 2 x 2HU + 1 x 1HU |
| 55144-143 | HCMR150-4S-H-10-150 158-175 MHZ 4CH x 100 W Single Isolator + DUPT-10 2 x 2HU + 1 x 1HU |
| 55142-153 | HCMR150-4D-L-5-150 144-162 MHZ 4CH x 100 W Dual Isolator + DUPT-5 2 x 2HU + 1 x 1HU |
| 55144-163 | HCMR150-4D-L-10-150 144-162 MHZ 4CH x 100 W Dual Isolator + DUPT-10 2 x 2HU + 1 x 1HU |
| 55142-173 | HCMR150-4D-H-5-150 158-175 MHZ 4CH x 100 W Dual Isolator + DUPT-5 2 x 2HU + 1 x 1HU |
| 55144-183 | HCMR150-4D-H-10-150 158-175 MHZ 4CH x 100 W Dual Isolator + DUPT-10 2 x 2HU + 1 x 1HU |
| Note | Power cable not included |