

# HCMR150-2-DU/CR

## Hybrid 2 channel VHF Combiner and Duplex Filter

HCMR150-2-DU/CR series is a VHF TX/RX hybrid Combiner and Duplex Filter with single or dual isolators used for combining 2 VHF transceivers into one antenna with close frequency spacing.

- Standard EIA 19" tray, 400 mm depth and 2HU in a closed cabinet.
- Comes with an integrated power indicating light emitting diode (LED)
- Integrated power supply, 100-240 VAC; 50/60 Hz
- Tuned to customer specified frequencies, needs to be specified when ordering



## ELECTRICAL SPECIFICATIONS

|                     |   |
|---------------------|---|
| Type                | VHF TX/RX Hybrid Combiner & Duplex Filter - 2 Channels  |
| Frequency           | L: 144 - 160 MHz<br>H: 160 - 175 MHz  |
| VSWR                | ≤ 1.5:1   |
| Impedance           | 50 Ohm  |
| Max. Input Power    | 50 Watts (Per channel)  |
| Insertion Loss (TX) | Single Isolator: < 5.2 dB<br>Dual Isolator: < 5.5 dB  |
| TX-TX spacing       | DU-5: ≤ 1.5 MHz<br>DU-10: ≤ 2.0 MHz   |
| TX-RX spacing       | DU-5: 4 - 7 MHz<br>DU-10: 8 -12 MHz   |
| Isolation RX-TX     | TX-TX spacing, DU-10:<br><0.5 MHz :> 80 dB   <2.0 MHz :> 65 dB<br>TX-TX spacing, DU-5:<br><0.5 MHz :> 70 dB   <1.5 MHz :> 55 dB |
| Isolation TX-RX     | RX-RX spacing <0.5 MHz :> 80 dB<br>RX-RX spacing <2.0 MHz :> 60 dB  |
| Isolation TX - TX   | Single Isolator: > 50 dB<br>Dual Isolator: > 70 dB  |
| Isolation RX-RX     | > 20 dB   |
| Bandwidth (RX)      | RX-RX spacing (DU-5): Max. 1.5 MHz<br>RX-RX spacing (DU-10): Max. 2.0 MHz   |
| Gain                | Approx. 13±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             | 484 x 89 x 423 mm (W x H x L)                    |
| Weight                | Single Isolator: 6.9 kg<br>Dual Isolator: 7.6 kg |
| Connector             | Type N-female                                    |
| Serial no.            | On product label                                 |
| Operating temperature | -20° to +60°C                                    |

## ORDERING INFORMATION

|              |   |
|--------------|---|
| 55122-013/CR | HCMR150-2S-L-5<br>144-160 MHz 2CH x 50 W Single Isolator + DU-5   |
| 55124-023/CR | HCMR150-2S-L-10<br>144-160 MHz 2CH x 50 W Single Isolator + DU-10 |
| 55122-033/CR | HCMR150-2S-H-5<br>160-175 MHz 2CH x 50 W Single Isolator + DU-5   |
| 55124-043/CR | HCMR150-2S-H-10<br>160-175 MHz 2CH x 50 W Single Isolator + DU-10 |
| 55122-053/CR | HCMR150-2D-L-5<br>144-160 MHz 2CH x 50 W Dual Isolator + DU-5     |
| 55124-063/CR | HCMR150-2D-L-10<br>144-160 MHz 2CH x 50 W Dual Isolator + DU-10   |
| 55122-073/CR | HCMR150-2D-H-5<br>160-175 MHz 2CH x 50 W Dual Isolator + DU-5     |
| 55124-083/CR | HCMR150-2D-H-10<br>160-175 MHz 2CH x 50 W Dual Isolator + DU-10   |
| Note         | Power cable not included  |



