

## Datasheet

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# HCMR450-2-DU

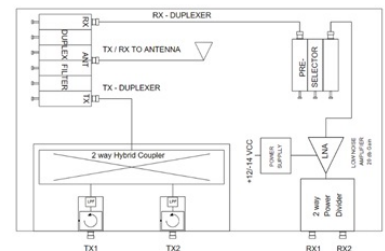
## 2CH UHF 400-475 MHz HYBRID combiner & duplexer

HCMR450-2-DU series is a UHF TX/RX hybrid combiner & duplexer with single or dual isolators used for combining 2 UHF transceivers into one antenna with close frequency spacing.

- Standard EIA 19" tray, 500 mm depth (3HU).
- Tuned to customer specified frequencies, need to be specified when ordering.
- Full bandwidth.

## ELECTRICAL SPECIFICATIONS

|                     |  |
|---------------------|--|
| Type                | UHF TX/RX Hybrid Combiner & duplexer - 2 Channels                  |
| Frequency           | 400 - 440 MHz<br>440 - 475 MHz                                     |
| VSWR                | ≤ 1.5:1  |
| Impedance           | 50 Ohm   |
| Max. Input Power    | 50 Watts (Per channel)   |
| Insertion Loss (TX) | Single Isolator: < 4.9 dB<br>Dual Isolator: < 5.2 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 <0.5 MHz :> 80dB<br>TX-TX spacing <2.0 MHz :> 60 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     | > 20dB   |
| Bandwidth (RX)      | Approx. 5 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)                                      |



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## MECHANICAL SPECIFICATIONS

|                       |  |
|-----------------------|--|
| Color                 | Black  |
| Dimension             | 482.6 x 133.5 x 500 mm (W x H x L)               |
| Weight                | Single Isolator: 5.9 kg<br>Dual Isolator: 6.3 kg |
| Connector             | Type N-female                                    |
| Serial no.            | On product label                                 |
| Operating temperature | -20° to +60°C                                    |

## ORDERING INFORMATION

|           |   |
|-----------|---|
| 55422-013 | HCMR450-2S-L-5<br>400-440 MHZ 2CH x 50 W Single Isolator + DU-5   |
| 55424-023 | HCMR450-2S-L-10<br>400-440 MHZ 2CH x 50 W Single Isolator + DU-10 |
| 55422-033 | HCMR450-2S-H-5<br>440-475 MHZ 2CH x 50 W Single Isolator + DU-5   |
| 55424-043 | HCMR450-2S-H-10<br>440-475 MHZ 2CH x 50 W Single Isolator + DU-10 |
| 55422-053 | HCMR450-2D-L-5<br>400-440 MHZ 2CH x 50 W Dual Isolator + DU-5     |
| 55424-063 | HCMR450-2D-L-10<br>400-440 MHZ 2CH x 50 W Dual Isolator + DU-10   |
| 55422-073 | HCMR450-2D-H-5<br>440-475 MHZ 2CH x 50 W Dual Isolator + DU-5     |
| 55424-083 | HCMR450-2D-H-10<br>440-475 MHZ 2CH x 50 W Dual Isolator + DU-10   |
| Note      | Power cable not included  |