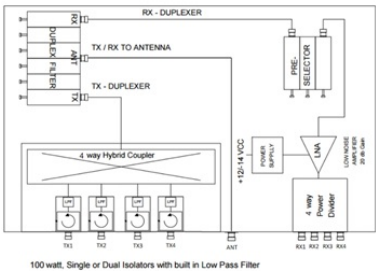


# HCMR450-4-DUPT

## Hybrid 4 channel UHF TX/RX Combiner and Duplex Filter HS

HCMR450-4-DUPT series is a UHF TX/RX hybrid combiner and duplexer with single or dual isolators used for combining 4 UHF transceivers into one antenna with close frequency spacing.

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



## ELECTRICAL SPECIFICATIONS

|                     |                                                                    |
|---------------------|--------------------------------------------------------------------|
| Type                | Hybrid 4 channel UHF TX/RX Combiner and Duplex Filter HS           |
| Frequency           | 400 - 440 MHz<br>440 - 475 MHz                                     |
| VSWR                | ≤ 1.5:1                                                            |
| Impedance           | 50 Ohm                                                             |
| Max. Input Power    | 100 Watts (Per channel)                                            |
| Insertion Loss (TX) | Single Isolator: < 8.6 dB<br>Dual Isolator: < 8.9 dB               |
| TX-TX spacing       | DUPT-5: ≤ 1.5 MHz<br>DUPT-10: ≤ 2.0 MHz                            |
| TX-RX spacing       | DUPT-5: 4 - 7 MHz<br>DUPT-10: 8 -12 MHz                            |
| Isolation RX-TX     | TX-TX spacing <0.5 MHz :> 90dB<br>TX-TX spacing <2.0 MHz :> 70 dB  |
| Isolation TX-RX     | RX-RX spacing <0.5 MHz :> 90 dB<br>RX-RX spacing <2.0 MHz :> 70 dB |
| Isolation TX - TX   | Single Isolator: > 50 dB<br>Dual Isolator: > 70 dB                 |
| Isolation RX-RX     | >20 dB                                                             |
| Bandwidth (RX)      | Approx. 5 MHz (Adjustable 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             | Two of:<br>482.6 x 89 x 300 mm (W x H x L)         |
| Weight                | Single Isolator: 10.2 kg<br>Dual Isolator: 11.0 kg |
| Connector             | Type N-female                                      |
| Serial no.            | On product label                                   |
| Operating temperature | -20° to +60°C                                      |

## ORDERING INFORMATION

|           |                                                                                     |
|-----------|-------------------------------------------------------------------------------------|
| 55442-113 | HCMR450-4S-L-5-150<br>400-440 MHZ 4CH x 100 W Single Isolator + DUPT-5<br>2 x 2HU   |
| 55444-123 | HCMR450-4S-L-10-150<br>400-440 MHZ 4CH x 100 W Single Isolator + DUPT-10<br>2 x 2HU |
| 55442-133 | HCMR450-4S-H-5-150<br>440-475 MHZ 4CH x 100 W Single Isolator + DUPT-5<br>2 x 2HU   |
| 55444-143 | HCMR450-4S-H-10-150<br>440-475 MHZ 4CH x 100 W Single Isolator + DUPT-10<br>2 x 2HU |
| 55442-153 | HCMR450-4D-L-5-150<br>400-440 MHZ 4CH x 100 W Dual Isolator + DUPT-5<br>2 x 2HU     |
| 55444-163 | HCMR450-4D-L-10-150<br>400-440 MHZ 4CH x 100 W Dual Isolator + DUPT-10<br>2 x 2HU   |
| 55442-173 | HCMR450-4D-H-5-150<br>440-475 MHZ 4CH x 100 W Dual Isolator + DUPT-5<br>2 x 2HU     |
| 55444-183 | HCMR450-4D-H-10-150<br>440-475 MHZ 4CH x 100 W Dual Isolator + DUPT-10<br>2 x 2HU   |
| Note      | Power cable not included                                                            |