

Datasheet

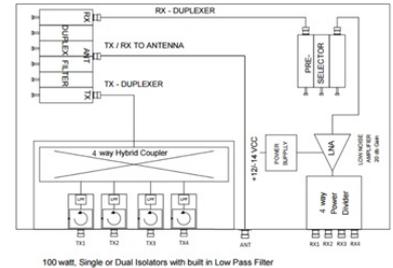
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HCMR150-4-DUPT

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)

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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