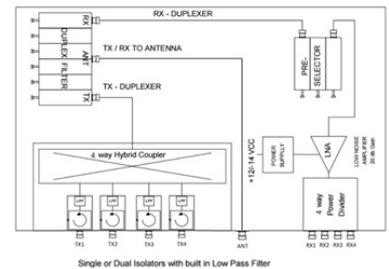Scan—Antenna®

HCMR150-4-DU

Hybrid 4 channel VHF TX/RX Combiner and Duplex Filter

HCMR150-4-DU 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" tray, 500 mm depth (3HU).
- Tuned to customer specified frequencies, need to be specified when ordering.
- Full bandwidth.

ELECTRICAL SPECIFICATIONS

Type	Hybrid 4 channel VHF TX/RX Combiner and Duplex Filter
Frequency	144 - 160 MHz 160 - 175 MHz
VSWR	≤ 1.5:1
Impedance	50 Ohm
Max. Input Power	50 Watts (Per channel)
Insertion Loss (TX)	Single isolator: < 8.6 dB Dual isolator: < 8.9 dB
TX-TX spacing	DU-5: ≤ 1.5 MHz DU-10: ≤ 2.0 MHz
TX-RX spacing	DU-5: 4 - 7 MHz DU-10: 8 -12 MHz
Isolation RX-TX	TX-TX spacing <0.4 MHz :> 80 dB TX-TX spacing <2.0 MHz :> 60 dB
Isolation TX-RX	RX-RX spacing <0.4 MHz :> 80 dB RX-RX spacing <2.0 MHz :> 60 dB
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

MECHANICAL SPECIFICATIONS

Color	Black Grey (RAL7021)
Dimension	482.6 x 133.5 x 500 mm (W x H x L)
Weight	Single isolator: 9.6 kg Dual isolator: 11.2 kg
Connector	Type N-female
Serial no.	On product label
Operating temperature	-20° to +60°C

ORDERING INFORMATION

55142-013	HCMR150-4S-L-5 144-160 MHZ 4CH x 50 W Single Isolator + DU-5
55144-023	HCMR150-4S-L-10 144-160 MHZ 4CH x 50 W Single Isolator + DU-10
55142-033	HCMR150-4S-H-5 160-175 MHZ 4CH x 50 W Single Isolator + DU-5
55144-043	HCMR150-4S-H-10 160-175 MHZ 4CH x 50 W Single Isolator + DU-10
55142-053	HCMR150-4D-L-5 144-160 MHZ 4CH x 50 W Dual Isolator + DU-5
55144-063	HCMR150-4D-L-10 144-160 MHZ 4CH x 50 W Dual Isolator + DU-10
55142-073	HCMR150-4D-H-5 160-175 MHZ 4CH x 50 W Dual Isolator + DU-5
55144-083	HCMR150-4D-H-10 160-175 MHZ 4CH x 50 W Dual Isolator + DU-10
Note	Power cable is not included