

Datasheet

1 / 2

HCMR150-3-DU

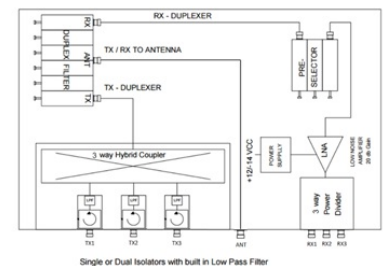
Hybrid 3 channel VHF TX/RX Combiner & duplexer

HCMR150-3-DU series is a VHF TX/RX hybrid combiner & duplexer with single or dual isolators used for combining 3 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	VHF TX/RX Hybrid Combiner + duplexer - 3 Channels
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: < 6.9 dB Dual Isolator: < 7.2 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 TX-TX	Single: > 50 dB Dual: > 70 dB
Isolation RX-TX	TX-TX spacing <0.4 MHz :> 80dB TX-TX spacing <2.0 MHz :> 60dB
Isolation TX-RX	RX-RX spacing <0.4 MHz :> 80dB RX-RX spacing <2.0 MHz :> 60dB
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

2 / 2

MECHANICAL SPECIFICATIONS

Color	Black Grey (RAL7021)
Dimension	482.6 x 133.5 x 500 mm (W x H x L)
Weight	Single isolator: 8.6 kg Dual isolator: 9.8 kg
Connector	Type N-female
Serial no.	On product label
Operating temperature	-20° to +60°C

ORDERING INFORMATION

55132-013	HCMR150-3S-L-5 144-160 MHZ 3CH x 50 W Single Isolator + DU-5
55134-023	HCMR150-3S-L-10 144-160 MHZ 3CH x 50 W Single Isolator + DU-10
55132-033	HCMR150-3S-H-5 160-175 MHZ 3CH x 50 W Single Isolator + DU-5
55134-043	HCMR150-3S-H-10 160-175 MHZ 3CH x 50 W Single Isolator + DU-10
55132-053	HCMR150-3D-L-5 144-160 MHZ 3CH x 50 W Dual Isolator + DU-5
55134-063	HCMR150-3D-L-10 144-160 MHZ 3CH x 50 W Dual Isolator + DU-10
55132-073	HCMR150-3D-H-5 160-175 MHZ 3CH x 50 W Dual Isolator + DU-5
55134-083	HCMR150-3D-H-10 160-175 MHZ 3CH x 50 W Dual Isolator + DU-10
Note	Power cable is not included