

Datasheet

1 / 2

HCMR450-3-DU

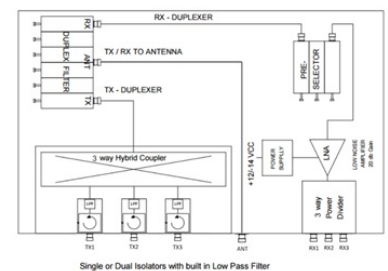
Hybrid 3 channel UHF TX/RX Combiner & duplexer

HCMR450-3-DU series is a UHF TX/RX hybrid combiner & duplexer with single or dual isolators used for combining 3 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 - 3 Channels
Frequency	400 - 440 MHz 440 - 475 MHz
VSWR	≤ 1.5:1
Impedance	50 Ohm
Max. Input Power	50 Watts (Per channel)
Insertion Loss (TX)	Single Isolator: < 6.6 dB Dual Isolator: < 6.9 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 <0.5 MHz :> 80dB TX-TX spacing <2.0 MHz :> 60 dB
Isolation TX-RX	RX-RX spacing <0.5 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. 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)



Datasheet

2 / 2

MECHANICAL SPECIFICATIONS

Color	Black
Dimension	482.6 x 133.5 x 500 mm (W x H x L)
Weight	Single isolator: 8.0 kg Dual isolator: 8.6 kg
Connector	Type N-female
Serial no.	On product label
Operating temperature	-20° to +60°C

ORDERING INFORMATION

55432-013	HCMR450-3S-L-5 400-440 MHz 3CH x 50 W Single Isolator + DU-5
55434-023	HCMR450-3S-L-10 400-440 MHz 3CH x 50 W Single Isolator + DU-10
55432-033	HCMR450-3S-H-5 440-475 MHz 3CH x 50 W Single Isolator + DU-5
55434-043	HCMR450-3S-H-10 440-475 MHz 3CH x 50 W Single Isolator + DU-10
55432-053	HCMR450-3D-L-5 400-440 MHz 3CH x 50 W Dual Isolator + DU-5
55434-063	HCMR450-3D-L-10 400-440 MHz 3CH x 50 W Dual Isolator + DU-10
55432-073	HCMR450-3D-H-5 440-475 MHz 3CH x 50 W Dual Isolator + DU-5
55434-083	HCMR450-3D-H-10 440-475 MHz 3CH x 50 W Dual Isolator + DU-10
Note	Power cable not included