

Powertec Hybrid Coupler, 2x2 Matrix, 698 to 3800 MHz, 4.3-10 Female, -155 dBc

Model Number

PCM-HY2-6938.432

GTIN-13

9337692001895

Component Type

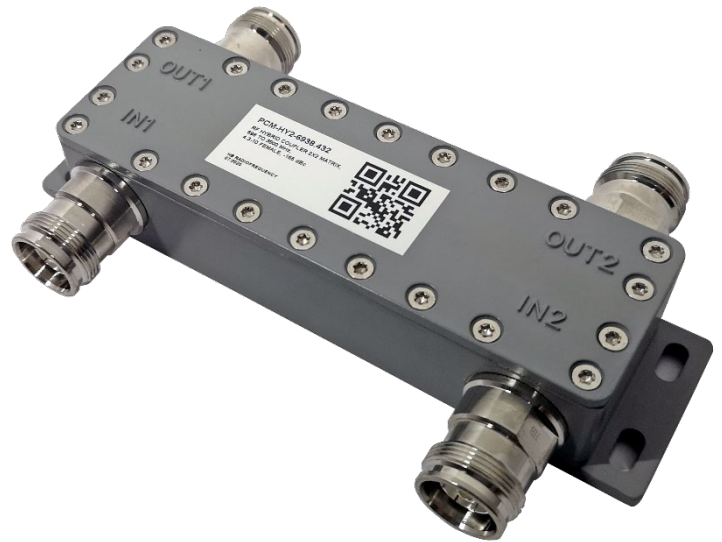
Hybrid Coupler

Usage

IBC / DAS

RF Category

Cellular



Hybrid Couplers are used to develop advanced RF transmission systems where interaction-free signal combining is required. 2x2 couplers are typically used as an effective means of combining two radio carriers. The unit has two input ports which feed two coupled output ports.

This 2x2 Hybrid Coupler has been developed for use as a 4G-5G MNC in passive in-building coverage systems, along with supporting high powered defence and aerospace technologies. The unit supports a wide frequency range from 700 to 3800 MHz, extremely low intermodulation with a -155 dBc PIM rating, and using latest generation 4.3-10 connectors.

With an IP67 ingress protection rating the power divider can be used indoors or outdoors. It's integrated mounting bracket provides for wall or surface mounting.

- 2x2 Matrix for 3 dB interaction-free coupling
- Meets Powertec OTAR & MCF IBC design standards
- Integrated cast aluminium mounting bracket
- IP67 ingress protection rating for harsh environments

Component Technical Data

PHYSICAL CHARACTERISTICS

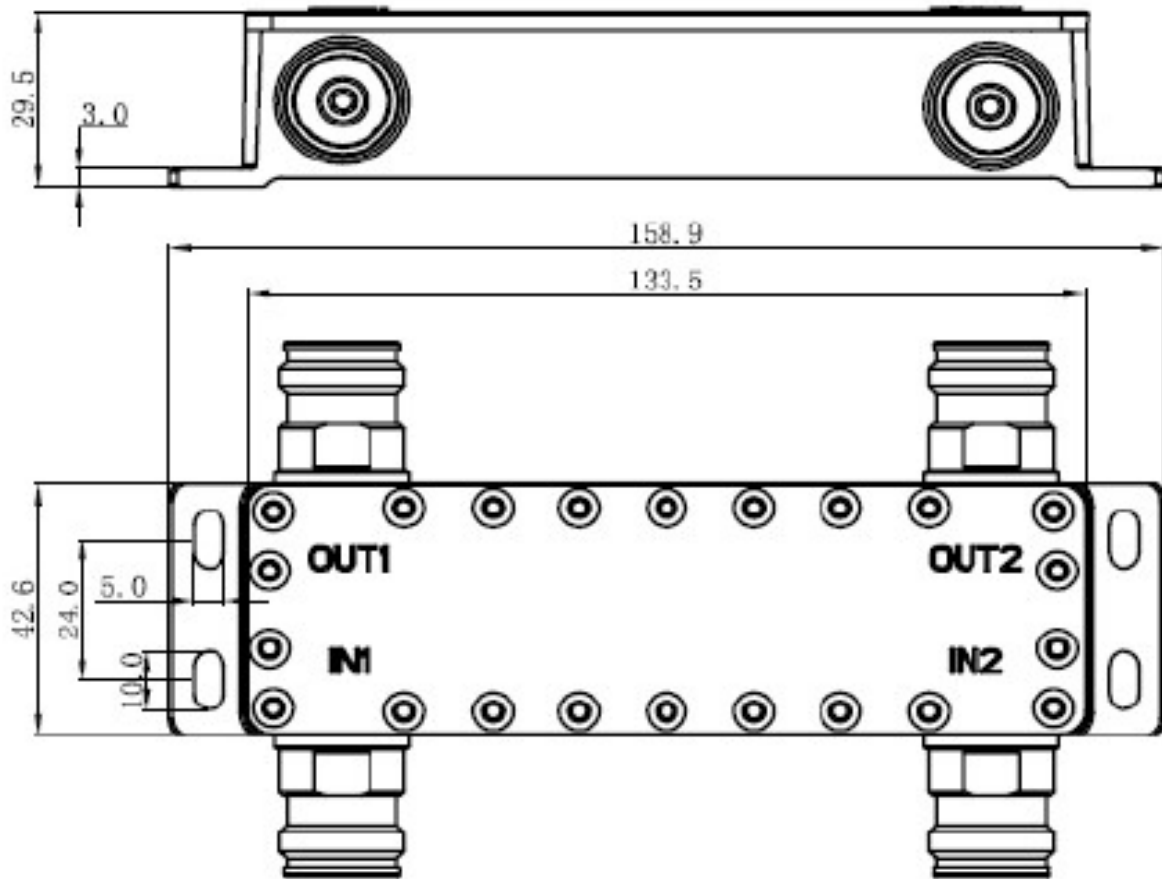
Construction Material	Aluminium	RF Connections	4
Finish	Powder Coat	Environmental Rating	IP67
Dimensions	159 x 102 x 29.5 mm	Operating Temperature	-40 °C to 85 °C
Weight	500 g	Mounting	Screw / Bolt

RF PERFORMANCE

Input Ports	2	Output Ports	2
Frequency Range	698 to 3800 MHz	Input Impedance	50 Ω
Inter-Port Isolation	> 25 dB	VSWR	< 1.25:1
Max. Input Power	> 300 W	PIM, 3 rd Order	< -155 dBc

PORT NUMBER	FUNCTION	INSERTION LOSS	CONNECTOR
Port #1	Input	0.25 dB	4.3-10 Female
Port #2	Input	0.25 dB	4.3-10 Female
Port #3	Coupled	3.00 dB	4.3-10 Female
Port #4	Coupled	3.00 dB	4.3-10 Female

CAD Drawing





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