

Powertec Hybrid Coupler, 4x4 Matrix, 698 to 3800 MHz, 4.3-10 Female, -155 dBc

Model Number

PCM-HY4-6938.432

GTIN-13

9337692001888

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. 4x4 matrices are typically used as an in-building multi-network combiner.

This 4x4 Hybrid Matrix 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 5G-compatible 4.3-10 connectors.

With an IP67 ingress protection rating the power divider can be used indoors or outdoors. A heavy-duty stainless-steel mounting bracket is included which provides for wall and pole mounting.

- 4x4 Matrix for 6 dB interaction-free coupling
- Meets Powertec OTAR & MCF IBC design standards
- Integrated cast aluminium mounting bracket suitable for tower mounting
- IP67 ingress protection rating for harsh environments

Component Technical Data

PHYSICAL CHARACTERISTICS

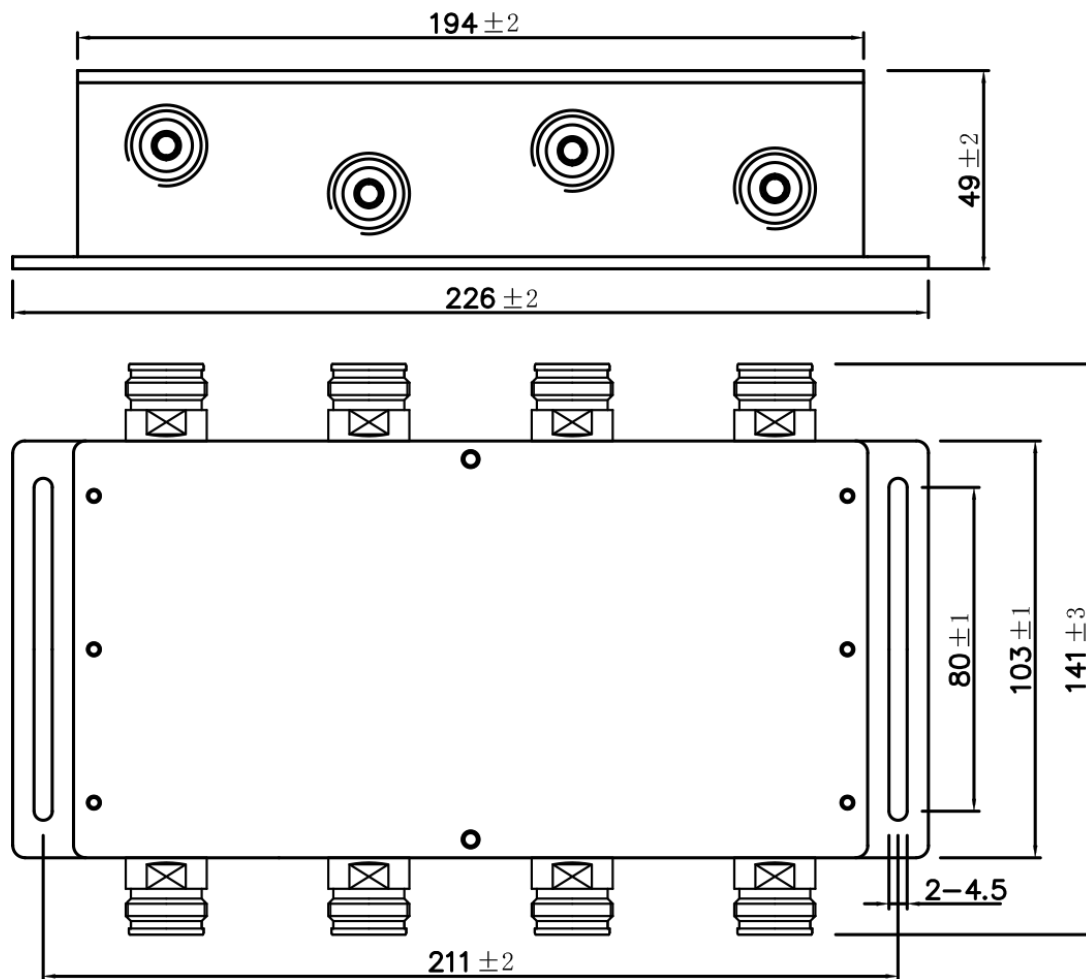
Construction Material	Aluminium	RF Connections	8
Finish	Powder Coat	Environmental Rating	IP67
Dimensions	197 x 179 x 84 mm	Operating Temperature	-40 °C to 85 °C
Weight	2.3 kg	Mounting	Screw / Bolt

RF PERFORMANCE

Input Ports	4	Output Ports	4
Frequency Range	698 to 3800 MHz	Input Impedance	50 Ω
Inter-Port Isolation	> 25 dB	VSWR	< 1.30:1
Max. Input Power	> 300 W	PIM, 3 rd Order	< -155 dBc

PORT NUMBER	FUNCTION	INSERTION LOSS	CONNECTOR
Port #1	Input	0.20 dB	4.3-10 Female
Port #2	Input	0.20 dB	4.3-10 Female
Port #3	Input	0.20 dB	4.3-10 Female
Port #4	Input	0.20 dB	4.3-10 Female
Port #5	Coupled	6.00 dB	4.3-10 Female
Port #6	Coupled	6.00 dB	4.3-10 Female
Port #7	Coupled	6.00 dB	4.3-10 Female
Port #8	Coupled	6.00 dB	4.3-10 Female

CAD Drawing





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