

# Powertec RF Directional Coupler, 8 dB, 698 to 3800 MHz, 4.3-10 Female, -155 dBc

SKU: IBC-PT-00056

MPN: PCM-DC8-6940.432

Barcode: 9337692001932

## Description

The Powertec RF Directional Coupler, model PCM-DC8-6940.432, is a high-performance component designed for RF signal management. Offering an 8 dB coupling value, it operates efficiently across a broad frequency range of 698 to 3800 MHz. This coupler features 4.3-10 Female connectors on all ports, ensuring compatibility with a wide range of systems.

Engineered for durability, it has an IP65 ingress protection rating, making it suitable for outdoor and harsh environments. It operates within temperatures ranging from -25 °C to 75 °C, and features a robust 3rd Order PIM rating of -155 dBc. The input impedance is standard at 50 Ω, aligning with industry norms.

The Powertec coupler maintains a VSWR of less than 1.3:1, with a minimal insertion loss of 0.80 dB and inter-port isolation greater than 28 dB, ensuring optimal signal integrity. It complies with RoHS standards, reflecting its adherence to environmental and safety regulations.

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## Powertec



Powertec is a wireless technology manufacturer and systems integrator based in Australia. Operating since 1995, Powertec has grown to become the leading wireless technology distributor in its region, and a leading Infratech systems developer. Supporting over 1500 partners the company provides procurement, design, project management, and support services across Australia, New Zealand, Pacific ...

# RF Specification

|                   |          |                   |          |
|-------------------|----------|-------------------|----------|
| Min. Frequency:   | 698 MHz  | Input Impedance:  | 50       |
| Max. Frequency:   | 3800 MHz | Max. Input Power: | 300 W    |
| Coupling / Split: | 8 dB     | PIM, 3rd Order:   | -155 dBc |

## Port Matrix

| Port Function | RF Interface  |
|---------------|---------------|
| Input         | 4.3-10 Female |
| Output        | 4.3-10 Female |
| Coupled       | 4.3-10 Female |

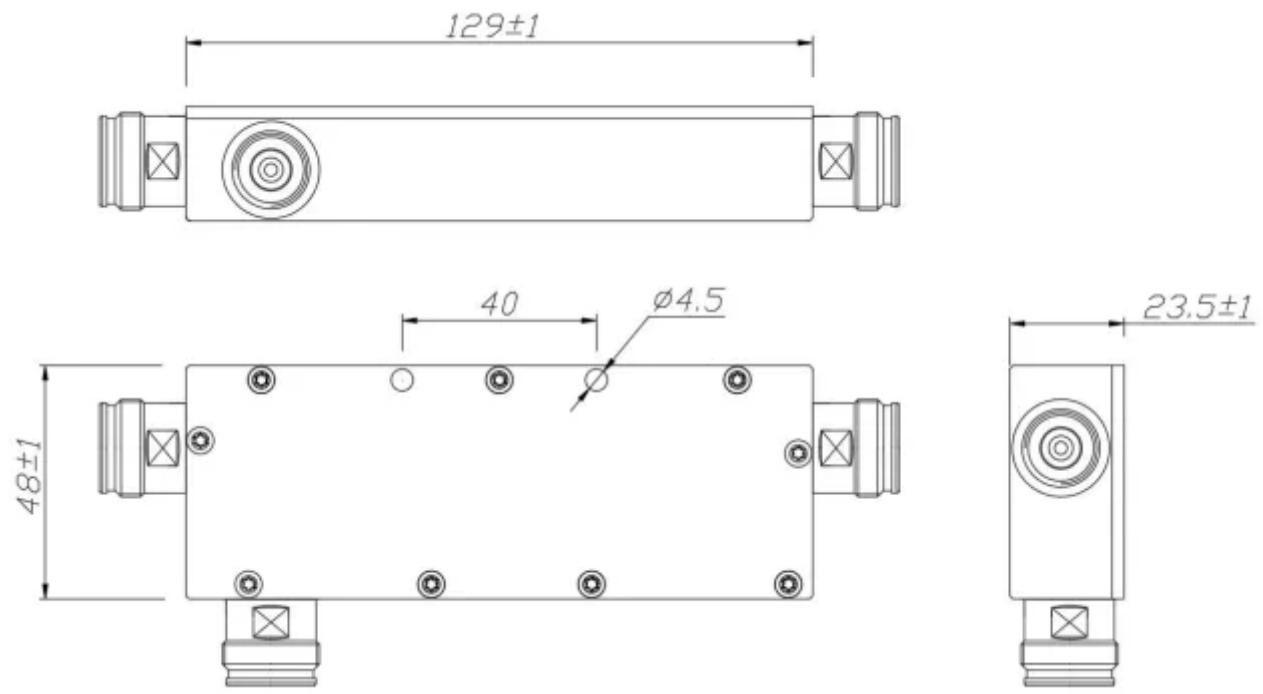
## Frequency Test Data

| Start Frequency | Stop Frequency | VSWR    | Insertion Loss | Inter-Port Iso. |
|-----------------|----------------|---------|----------------|-----------------|
| 698 MHz         | 3800 MHz       | < 1.3:1 | 0.8 dB         | > 28 dB         |

## Physical Specification

|                     |                     |                             |        |
|---------------------|---------------------|-----------------------------|--------|
| Input Ports:        | 1                   | Min. Operating Temperature: | -25 °C |
| Output Ports:       | 2                   | Max. Operating Temperature: | 75 °C  |
| Subtype:            | Directional Coupler | Compliance/Certifications:  | RoHS   |
| Ingress Protection: | IP65                |                             |        |
| Dimensions:         | 129x48x23.5         |                             |        |
| Weight:             | 0.38 kg             |                             |        |

## Drawing



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