Powertec Wireless Technology
ABN: 42 082 948 463
PO Box 1034, Ashmore City
Queensland, Australia, 4214
sales@powertec.com.au
1300 769 378

# CommScope Directional Coupler, 10 dB, 555-6000 MHz, 4.3-10 Female, -165 dBc

SKU
ACC-CS-00020
MPN
C-10-UW-43-AI6

## Description

The CommScope Directional Coupler (SKU: ACC-CS-00020), part number C-10-UW-43-AI6, offers reliable performance for RF passive applications. With a coupling value of 10 dB, it operates efficiently across a broad frequency range from 555 MHz to 6000 MHz. Designed to withstand harsh environments, it is IP67-rated and functions within temperatures from -35°C to 85°C. The coupler features a 3rd Order PIM rating of -165 dBc and a 50 Ω input impedance, ensuring minimal signal distortion.

Equipped with 4.3-10 Female connectors on all ports, this coupler provides optimal connectivity. Its performance is highlighted by a VSWR of <1.3:1 and insertion loss of 0.80 dB within the 2700 to 3800 MHz range, maintaining inter-port isolation of >28 dB. For frequencies between 555 and 2700 MHz, it achieves a VSWR of <1.2:1 with isolation over 30 dB. It maintains a VSWR of <1.3:1 and isolation greater than 26 dB for the 3800 to 6000 MHz range.

CommScope, with over 40 years of experience, is renowned for its innovation in telecommunications infrastructure, serving clients across more than 130 countries. This coupler is ISO 9001 certified, reflecting CommScope's commitment to quality and reliability in network solutions.




COMMSCOPE®

**CommScope**

CommScope (NASDAQ: COMM) helps design, build and manage wired and wireless networks around the world. As a communications infrastructure leader, we shape the always-on networks of tomorrow. For more than 40 years, our global team of greater than 20,000 employees, innovators and technologists have empowered customers in all regions of the world to anticipate what’s next and push the boundaries of ...

# RF Specification

Min. Frequency
555 MHz
Max. Frequency
6000 MHz
Coupling / Split
10 dB
Input Impedance
50 Ω
Max. Input Power
300 W
PIM, 3rd Order
-165 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. |
|---|---|---|---|---|
| 2700 MHz | 3800 MHz | < 1.25:1 | 0.8 dB | > 28 dB |
| 555 MHz | 2700 MHz | < 1.2:1 | | > 30 dB |
| 3800 MHz | 4900 MHz | < 1.3:1 | | > 26 dB |
| 4900 MHz | 6000 MHz | < 1.3:1 | | > 26 dB |

# Physical Specification

Input Ports
1
Output Ports
2
Subtype
Directional Coupler
Ingress Protection
IP67
Dimensions
159 x 72 x 22

Weight
0.38 kg
Min. Operating Temperature
-35 °C
Max. Operating Temperature
85 °C
Compliance/Certifications
ISO 9001 Quality Management

Disclaimer: Although care has been taken to ensure the accuracy, completeness and reliability of the information provided, Powertec assumes no responsibility therefore. The user of the information agrees that the information is subject to change without notice. Powertec assumes no responsibility for the consequences of use of such information, nor for any infringement of third party intellectual property rights which may result from its use. IN NO EVENT SHALL POWERTEC BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, OR INCIDENTAL DAMAGE RESULTING FROM, ARISING OUT OF OR IN CONNECTION WITH THE USE OF THE INFORMATION.

