

# 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.



## RF Specification

### 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 ...

Min. Frequency:	555 MHz	Input Impedance:	50
Max. Frequency:	6000 MHz	Max. Input Power:	300 W
Coupling / Split:	10 dB	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	Min. Operating Temperature:	-35 °C
Output Ports:	2	Max. Operating Temperature:	85 °C
Subtype:	Directional Coupler	Compliance/Certifications:	ISO 9001 Quality Management
Ingress Protection:	IP67		
Dimensions:	159 x 72 x 22		
Weight:	0.38 kg		

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