

DATA SHEET

Ultra-broadband Power Divider

PDO-55-xxx



- High power, wideband, power divider at 750W from 555 to 3800 MHz
- Low RF Insertion Loss and excellent return loss performance
- Available in 2-way, 3-way and 4-way configurations
- Orderable with DIN 7-16, 4.3-10 and N-type connectors
- Rugged outdoor rated and high reliability design
- Designed for ultra low PIM performance
- RoHS compliant

Overview

CCI's PDO-55 series of Power Dividers deliver high power performance at 750 Watts, while covering a wide frequency band 555 to 3800 MHz. Each model provides low PIM values with very low insertion loss and excellent return loss performance. The units are offered in a range of dividing values which is very useful for optimizing RF power distribution which is often required for distributed antenna systems (DAS).

The extremely wide frequency range allows use with multiband and broadband antennas and DAS systems, and the high power handling makes them ideal for use with wireless base stations. These units are constructed with a weatherproof aluminum IP67 rated housing and with IP68 immersion rated connectors suited to long-life outdoor use. The power dividers can be wall mounted with the included bracket and the RF ports can be configured with either DIN 7-16, 4.3-10 or N-type connectors.

CCI filter and combiner products are designed and produced to ISO 9001 certification standards for reliability and quality at our state-of-the-art engineering and manufacturing facilities.

DS-PDO55xxx-V1.1-190110



SPECIFICATIONS

Ultra-broadband Power Divider

PDO-55-xxx

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Electrical Specification	_		
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RF Parameter			
Frequency Range		555 - 3400 MHz	
Style	2-Way	3-Way	4-Way
Insertion Loss	$3.0 \text{ dB} \pm 0.3 \text{ dB}$	4.8 dB ± 0.3 dB	6.0 dB ± 0.3 dB
Coupling Variation	≤ 0.3 dB		
Return Loss	≤ -18 dB min; ≤ -20 dB typ		
Frequency Range	3400 - 3800 MHz		
Style	2-Way	3-Way	4-Way
Insertion Loss	3.0 dB ± 0.3 dB	4.8 dB ± 0.3 dB	6.0 dB ± 0.5 dB
Coupling Variation	≤ 0.3 dB		≤ 0.5 dB
Return Loss	≤ -18 dB min; ≤ -20 dB typ		≤ -15 dB min; ≤ -17 dB typ
General Characteristics			
Continuous Average Power	750 W		
Peak Envelope Power	7.5 kW maximum		
Impedance	50 ohms		
Intermodulation Performance	<-117 dBm (-160 dBc) at 2 × +43 dBm tones		
	n		
Environmental Specificatio			
Operating Temperature	-40 °C to +65 °C		
Enclosure		IP68, outdoor use	

Mechanical Specification			
Style	2-Way	3-Way	4-Way
Connectors	3	4	5
Housing Dimensions	224 x 32 x 32 mm (8.82 x 1.26 x 1.26 in.)		
Housing Dimensions with Brackets	224 x 60 x 47 mm (8.82 x 2.36 x 1.85 in.)		
Weight, 7-16 connectors	1.04 Kg (2.3 lbs)	1.16 Kg (2.6 lbs)	1.28 Kg (2.8 lbs)
Weight, 4.3-10 connectors	0.90 Kg (2.0 lbs)	0.97 Kg (2.1 lbs)	1.04 Kg (2.3 lbs)
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IP68

5 - 95%

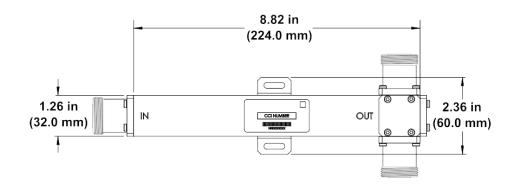
Connectors Relative Humidity

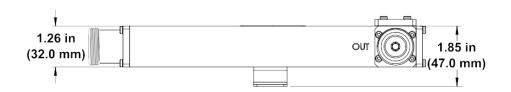


SPECIFICATIONS

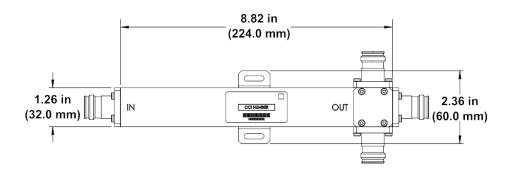
Ultra-broadband Power Divider

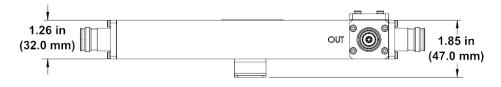
PDO-55-xxx





Ultra-broadband 2-way Power Divider with DIN 7-16 Female Connectors (PDO-55-2F1) Outline Drawing





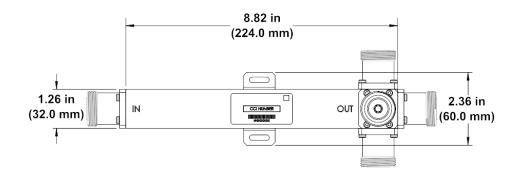
Ultra-broadband 3-way Power Divider with DIN 7-16 Female Connectors (PDO-55-3F2) Outline Drawing



SPECIFICATIONS

Ultra-broadband Power Divider

PDO-55-xxx





Ultra-broadband 4-way Power Divider with DIN 7-16 Female Connectors (PDO-55-4F1) Outline Drawing



STANDARDS & CERTIFICATIONS

Ultra-broadband Power Divider

PDO-55-xxx

Parts & Accessories

PDO-55-2F1	2-way with DIN 7-16 female connectors
PDO-55-2F2	2-way with 4.3-10 female connectors
PDO-55-3F1	3-way with DIN 7-16 female connectors
PDO-55-3F2	3-way with 4.3-10 female connectors
PDO-55-4F1	4-way with DIN 7-16 female connectors
PDO-55-4F2	4-way with 4.3-10 female connectors

Standards & Compliance

Safety EN 60950-1, UL 60950-1

Emission EN 55022

Immunity EN 55024

Environmental IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-5,

IEC 60068-2-6, IEC-60068-2-11, IEC 60068-2-14, IEC 60068-2-18, IEC 60068-2-27, IEC 60068-2-29, IEC 60068-02-30, IEC 60068-2-52, IEC 60068-2-64,

GR-63-CORE 4.3.1, EN 60529 IP67 & IP68

Certifications

Federal Communication Commission (FCC) Part 15 Class B, CE, CSA US, ISO 9001











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