



In-building Wireless Passive Products and Antennas

Ordering Guide

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Ordering Guide

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Passive Devices

CommScope offers the passive devices that power many of the world’s most efficient wireless networks. Our splitters, couplers, tappers and termination are manufactured to the highest standards to ensure that active components in the network function properly. We pay special attention to soldering, sealing, and the use of non-ferric-based designs to prevent network-crippling passive intermodulation (PIM) often caused by poor connections and vibrations.

By delivering performance and longevity, our passive devices help operators optimize their OpEx while maximizing their network efficiency.

Tappers

Tappers support indoor and outdoor applications for Public Safety and Mobile services (2G/3G/4G/5G and WiFi) from 340MHz to 6GHz. Each unit couples a defined fraction of high-power cellular signal with minimal reflections or loss. The wide frequency range is ideal for multiband antennas, radiating cable systems and in-wire base stations.

Description	PIM	Connector Type	Part Number	
Tappers 340–960/1710–2700 MHz				
6 dB	-160dBc	7-16 DIN Female	CT-6-TCPUSE-Di6	
8 dB		7-16 DIN Female	CT-8-TCPUSE-Di6	
10 dB		7-16 DIN Female	CT-10-TCPUSE-Di6	
13 dB		7-16 DIN Female	CT-13-TCPUSE-Di6	
15 dB		7-16 DIN Female	CT-15-TCPUSE-Di6	
20 dB		7-16 DIN Female	CT-20-TCPUSE-Di6	
Tappers 340–6000 MHz				
5 dB	-163dBc for N type, -165dBc for 4.3-10 type	4.3-10 Female	CT-5-TUW-43-i6	
6 dB		N Female	CT-5-TUW-Ni6	
		4.3-10 Female	CT-6-TUW-43-i6	
8 dB		N Female	CT-6-TUW-Ni6	
		4.3-10 Female	CT-8-TUW-43-i6	
10 dB		N Female	CT-8-TUW-Ni6	
		4.3-10 Female	CT-10-TUW-43-i6	
13 dB		N Female	CT-10-TUW-Ni6	
		4.3-10 Female	CT-13-TUW-43-i6	
15 dB		N Female	CT-13-TUW-Ni6	
		4.3-10 Female	CT-15-TUW-43-i6	
20 dB		N Female	CT-15-TUW-Ni6	
		4.3-10 Female	CT-20-TUW-43-i6	
30 dB		N Female	CT-20-TUW-Ni6	
		4.3-10 Female	CT-30-TUW-43-i6	
			N Female	CT-30-TUW-Ni6



Air Directional Couplers

These couplers are ideal for complex applications. They enforce very low passive intermodulation, minimize RF insertion loss and enable multiband frequency coverage.

Description	PIM	Connector Type	Part Number
Air Directional Couplers 555-2700 MHz			
5 dB	-160dBc	7-16 DIN Female	C-5-CPUSE-D-Ai6
6 dB		7-16 DIN Female	C-6-CPUSE-D-Ai6
8 dB		7-16 DIN Female	C-8-CPUSE-D-Ai6
10 dB		7-16 DIN Female	C-10-CPUSE-D-Ai6
13 dB		7-16 DIN Female	C-13-CPUSE-D-Ai6
15 dB		7-16 DIN Female	C-15-CPUSE-D-Ai6
20 dB		7-16 DIN Female	C-20-CPUSE-D-Ai6
30 dB		7-16 DIN Female	C-30-CPUSE-D-Ai6
Air Directional Couplers 555-6000 MHz			
5 dB	-163dBc for N type, -165dBc for 4.3-10 type	N Female	C-5-UW-N-Ai6
		4.3-10 Female	C-5-UW-43-Ai6
6 dB		N Female	C-6-UW-N-Ai6
		4.3-10 Female	C-6-UW-43-Ai6
8 dB		N Female	C-8-UW-N-Ai6
		4.3-10 Female	C-8-UW-43-Ai6
10 dB		N Female	C-10-UW-N-Ai6
		4.3-10 Female	C-10-UW-43-Ai6
13 dB		N Female	C-13-UW-N-Ai6
		4.3-10 Female	C-13-UW-43-Ai6
15 dB		N Female	C-15-UW-N-Ai6
		4.3-10 Female	C-15-UW-43-Ai6
20 dB	N Female	C-20-UW-N-Ai6	
	4.3-10 Female	C-20-UW-43-Ai6	
30 dB	N Female	C-30-UW-N-Ai6	
	4.3-10 Female	C-30-UW-43-Ai6	

Description	PIM	Connector Type	Part Number
Low PIM Air Directional Couplers 340-2700 MHz			
6 dB	-160dBc	7-16 DIN Female	C-6-TCPUSE-D-Ai6
		N Female	C-6-TCPUSE-N-Ai6
10 dB		7-16 DIN Female	C-10-TCPUSE-D-Ai6
		N Female	C-10-TCPUSE-N-Ai6
15 dB		7-16 DIN Female	C-15-TCPUSE-D-Ai6
		N Female	C-15-TCPUSE-N-Ai6
20 dB		7-16 DIN Female	C-20-TCPUSE-D-Ai6
		N Female	C-20-TCPUSE-N-Ai6
30 dB		7-16 DIN Female	C-30-TCPUSE-D-Ai6
		N Female	C-30-TCPUSE-N-Ai6

Description	PIM	Connector Type	Part Number
ValuDAS® Air Directional Couplers 698-2700 MHz			
6 dB	-155dBc	N Female	VD-C6-CPUSE-N-A
8 dB		N Female	VD-C8-CPUSE-N-A
10 dB		N Female	VD-C10-CPUSE-N-A
13 dB		N Female	VD-C13-CPUSE-N-A
15 dB		N Female	VD-C15-CPUSE-N-A
20 dB		N Female	VD-C20-CPUSE-N-A



10 dB Coupler
DIN Female Connector
(C-10-CPUSE-D-Ai6)



10 dB Coupler
N Female Connector
(C-10-UW-N-Ai6)



10 dB Coupler
4.3-10 N Female Connector
(C-10-UW-43-Ai6)



6 dB Low PIM Coupler
DIN Female Connector
(C-6-TCPUSE-D-Ai6)



6 dB Low PIM Coupler
N Female Connector
(C-6-TCPUSE-N-Ai6)



8 dB ValuDAS Coupler
N Female Connector
(VD-C8-CPUSE-N-A)

High Power Hybrid Matrix

Multiband 4x4 and 3x3 High Power Hybrid Matrices combine 4 or 3 input signals into 4 or 3 output signals with minimum dissipative loss. Hybrid Matrices can be used for indoor or outdoor applications. Hybrid Matrices use air dielectric technology and as a result offer very low intermodulation characteristics over a wider frequency range. A wide frequency range allows for use with single or multiband signal sources. The device is designed to maximize the isolation and minimize intermodulation.



4x4 Hybrid Matrix
(H-4X4-CPUSE-43-Ai6)



3x3 Hybrid Matrix
(H-3X3-CPUSE-43-Ai6)

Description	Connector Type	Part Number
Low PIM 4x4 High Power Hybrid Matrix 555-2700 MHz, 6.1 dB	4.3-10 Female	H-4X4-CPUSE-43-Ai6
	N Female	H-4X4-CPUSE-NAi6
	7-16 DIN Female	H-4X4-CPUSE-DAi6
Low PIM 3x3 High Power Hybrid Matrix 555-2700 MHz, 5.0 dB	4.3-10 Female	H-3X3-CPUSE-43-Ai6

Hybrid Air Dielectric Couplers

Hybrid couplers combine two wireless carriers to a single antenna feed or cable. They maximize isolation in wireless bands by using a few solder joints and contain an air dielectric to minimize loss and enhance reliability. One feed requires the termination of an output port in 50 ohms and results in a 3 dB loss per signal. Using both outputs for two similar feeds eliminates the loss.

Description	PIM	Frequency Band	Connector Type	Part Number
Hybrid Air Dielectric Couplers				
3 dB	-160dBc for N type and DIN type, -162dBc for 4.3-10 type	555-2700 MHz	7-16 DIN Female	H-3-CPUSE-D-Ai6
			N Female	H-3-CPUSE-N-Ai6
			4.3-10 Female	H-3-CPUSE-43-Ai6
Low PIM Hybrid Air Dielectric Couplers				
3 dB	-163dBc for N type, -165dBc for 4.3-10 type	555-6000 MHz	N Female	H-3-UW-N-Ai6
			4.3-10 Female	H-3-UW-43-Ai6
3.1 dB	-160dBc	340-2700 MHz	N Female	H-3-TCPUSE-N-Ai6
ValuDAS Hybrid Couplers				
3.1 dB	-155dBc	698-2700 MHz	N Female	VD-H2X2-CPUSE-N-A
			4.3-10 Female	VD-H2X2-CPUSE-43-A
ValuDAS Air Dielectric Couplers				
6 dB	-155dBc	698-2700 MHz	4.3-10 Female	VD-C6-CPUSE-43-A
8 dB				VD-C8-CPUSE-43-A
10 dB				VD-C10-CPUSE-43-A
13 dB				VD-C13-CPUSE-43-A
15 dB				VD-C15-CPUSE-43-A
20 dB				VD-C20-CPUSE-43-A
30 dB				VD-C30-CPUSE-43-A



Hybrid Coupler
(H-3-CPUSE-D-Ai6)



Low PIM Hybrid Air Dielectric Coupler
(H-3-TCPUSE-N-Ai6)



ValuDAS Hybrid Coupler
(VD-H2X2-CPUSE-N-A)

Power Splitters

Multiband high-power splitters evenly distribute high-power signals with minimal reflections or loss. The reactive design employs no resistors, eliminating potential PIM damage. The SMR, PCS, UMTS and LTE frequency range enables use with single or multiband antennas and radiating cable systems. Minimal solder joints and an air dielectric enhance reliability.

Description	PIM	Connector Type	Part Number
Reactive Power Splitters 555–2700 MHz			
Two-Way	-160 dBc	7-16 DIN Female	S-2-CPUSE-H-Di6
Three-Way	-160 dBc	7-16 DIN Female	S-3-CPUSE-H-Di6
Four-Way	-160 dBc	7-16 DIN Female	S-4-CPUSE-H-Di6
Low Power Splitters 555–2700 MHz			
Two-Way	-130 dBc	N Female	S-2-CPUSE-L-N
	-150 dBc	N Female	S-2-CPUSE-L-Ni
	-153 dBc	4.3-10 Female	S-2-CPUSE-L-43-i53
Three-Way	-130 dBc	N Female	S-3-CPUSE-L-N
	-150 dBc	N Female	S-3-CPUSE-L-Ni
	-153 dBc	4.3-10 Female	S-3-CPUSE-L-43-i53
Four-Way	-130 dBc	N Female	S-4-CPUSE-L-N
	-150 dBc	N Female	S-4-CPUSE-L-Ni
	-153 dBc	4.3-10 Female	S-4-CPUSE-L-43-i53
ValuDAS Reactive Power Splitters 698–2700 MHz			
Two-Way	-155 dBc	N Female	VD-S2-CPUSE-H-N
		4.3-10 Female	VD-S2-CPUSE-H-43
Three-Way	-155 dBc	N Female	VD-S3-CPUSE-H-N
		4.3-10 Female	VD-S3-CPUSE-H-43
Four-Way	-155 dBc	N Female	VD-S4-CPUSE-H-N
		4.3-10 Female	VD-S4-CPUSE-H-43



Four-Way Reactive Power Splitter
7-16 DIN Female Connector
(S-4-CPUSE-H-Di6)



Four-Way Low Power Splitter
N Female Connector
(S-4-CPUSE-L-N)



Four-Way ValuDAS Reactive Power Splitter
N Female Connector
(VD-S4-CPUSE-H-N)

Continued on next page

Power Splitters continued

Description	PIM	Frequency Band	Connector Type	Part Number
Multiband Low PIM Reactive High Power Splitters				
Two-Way	-160 dBc	340–2700 MHz	7-16 DIN Female	S-2-TCPUSE-H-Di6
			N Female	S-2-TCPUSE-H-Ni6
Three-Way		340–2700 MHz	7-16 DIN Female	S-3-TCPUSE-H-Di6
			N Female	S-3-TCPUSE-H-Ni6
Four-Way		340–2700 MHz	7-16 DIN Female	S-4-TCPUSE-H-Di6
			N Female	S-4-TCPUSE-H-Ni6
Ultra Wideband Low PIM Reactive High Power Splitters				
Two-Way	-163dBc for N type, -165dBc for 4.3-10 type	555–6000 MHz	N Female	S-2-UW-H-Ni6
			4.3-10 Female	S-2-UW-H-43-i6
Three-Way		555–6000 MHz	N Female	S-3-UW-H-Ni6
			4.3-10 Female	S-3-UW-H-43-i6
Four-Way		555–6000 MHz	N Female	S-4-UW-H-Ni6
			4.3-10 Female	S-4-UW-H-43-i6



Two-Way Multiband Low PIM Splitter
N Female Connector
(S-2-TCPUSE-H-Ni6)



Three-Way Multiband Low PIM Splitter
7-16 DIN Female Connector
(S-3-TCPUSE-H-Di6)



Four-Way Multiband Low PIM Splitter
N Female Connector
(S-4-TCPUSE-H-Ni6)



Two-Way Ultra Wideband Splitter
N Female Connector
(S-2-UW-H-Ni6)



Three-Way Ultra Wideband Splitter
4.3-10 Female Connector
(S-3-UW-H-43-i6)



Four-Way Ultra Wideband Splitter
N Female Connector
(S-4-UW-H-N-i6)

Terminations

Terminations are ideal for high power applications where low PIM is essential. They cover up to 200 W and can be used to terminate unused/open RF ports.

Description	Connector Type	Part Number
Terminations 0–6000 MHz		
2 Watt	N Male	T-2-UW-NM
	N Female	T-2-UW-NF
	4.3-10 Male	T-2-UW-43-M
	4.3-10 Female	T-2-UW-43-F
10 Watt	N Male	T-10-UW-NM
	N Female	T-10-UW-NF
	4.3-10 Male	T-10-UW-43-M
	4.3-10 Female	T-10-UW-43-F
25 Watt	N Male	T-25-UW-NM
	N Female	T-25-UW-NF
	4.3-10 Male	T-25-UW-43-M
	4.3-10 Female	T-25-UW-43-F
50 Watt	N Male	T-50-UW-NM
	N Female	T-50-UW-NF
	4.3-10 Male	T-50-UW-43-M
	4.3-10 Female	T-50-UW-43-F
100 Watt	N Male	T-100-UW-NM
	N Female	T-100-UW-NF
	4.3-10 Male	T-100-UW-43-M
	4.3-10 Female	T-100-UW-43-F



2 Watt
4.3-10 Male Connector
(T-2-UW-43-M)



2 Watt
4.3-10 Female Connector
(T-2-UW-43-F)



100 Watt
4.3-10 Male Connector
(T-100-UW-43-M)

Description	PIM	Connector Type	Part Number
Low PIM Terminations 555-2700 MHz for 7-16 DIN and N connectors 340-2700 MHz for 4.3-10 connectors			
10 Watt	PIM: -160dBc for N and DIN type, -162dBc for 4.3-10 type	7-16 DIN Female	T-10-DFi6
		7-16 DIN Male	T-10-DMi6
		N Female	T-10-NFi6
		N Male	T-10-NMi6
		4.3-10 Female	T-10-43-F-i6
		4.3-10 Male	T-10-43-M-i6
30 Watt		7-16 DIN Female	T-30-DFi6
		7-16 DIN Male	T-30-DMi6
		N Female	T-30-NFi6
		N Male	T-30-NMi6
		4.3-10 Female	T-30-43-F-i6
		4.3-10 Male	T-30-43-M-i6
50 Watt		7-16 DIN Female	T-50-DFi6
		7-16 DIN Male	T-50-DMi6
		N Female	T-50-NFi6
		N Male	T-50-NMi6
		4.3-10 Female	T-50-43-F-i6*
		4.3-10 Male	T-50-43-M-i6*
100 Watt		7-16 DIN Female	T-100-DFi6
		7-16 DIN Male	T-100-DMi6
		N Female	T-100-NFi6
		N Male	T-100-NMi6
		4.3-10 Female	T-100-43-F-i6*
		4.3-10 Male	T-100-43-M-i6*
200 Watt	7-16 DIN Female	T-200-DFi6	
	7-16 DIN Male	T-200-DMi6	

*Frequency band: DC-3 GHz



30 Watt
N Female Connector
(T-30-DFi6)



30 Watt
N Male Connector
(T-30-DMi6)



50 Watt
4.3-10 Male Connector
(T-50-43-M-i6)

Attenuators

Description	Connector Type	Part Number
Attenuators 555–2700 MHz, –160 dBc		
3 dB	4.3-10 Female to Female	AT-3-43-FFi6
	N Female - N Female	AT-3-N-FFi6
6 dB	4.3-10 Female to Female	AT-6-43-FFi6
	4.3-10 Male to Female	AT-6-43-MFi6
	N Female - N Female	AT-6-N-FFi6
	N Male - N Female	AT-6-N-MFi6
	DIN Male - DIN Female	AT-6-D-MFi6
10 dB	4.3-10 Female to Female	AT-10-43-FFi6
	4.3-10 Male to Female	AT-10-43-MFi6
	N Female - N Female	AT-10-N-FFi6
	N Male - N Female	AT-10-N-MFi6
	DIN Male - DIN Female	AT-10-D-MFi6
15 dB	4.3-10 Female to Female	AT-15-43-FFi6
	4.3-10 Male to Female	AT-15-43-MFi6
	N Female - N Female	AT-15-N-FFi6
	N Male - N Female	AT-15-N-MFi6
	DIN Male - DIN Female	AT-15-D-MFi6
20 dB	4.3-10 Female to Female	AT-20-43-FFi6
	4.3-10 Male to Female	AT-20-43-MFi6
	N Female - N Female	AT-20-N-FFi6
	N Male - N Female	AT-20-N-MFi6
	DIN Male - DIN Female	AT-20-D-MFi6
30 dB	4.3-10 Female to Female	AT-30-43-FFi6
	4.3-10 Male to Female	AT-30-43-MFi6
	N Female - N Female	AT-30-N-FFi6
	N Male - N Female	AT-30-N-MFi6
	DIN Male - DIN Female	AT-30-D-MFi6



3 dB Attenuator
N Female - N Female Connector
(AT-3-N-FFi6)



10 dB Attenuator
N Male - N Female Connector
(AT-10-N-MFi6)



20 dB Attenuator
DIN Male - DIN Female Connector
(AT-20-D-MFi6)



30 dB Attenuator
4.3-10 Female - 4.3-10 Female Connector
(AT-30-43-FFi6)

Universal Bracket Kit

Description	Dimensions (HxWxL)	Part Number
Universal Bracket Kit Includes nylon plugs and screws Color: Silver (qty 5)	0.43" x 0.59" x 3.35"	42396A-17

