



FDPL4020AD4-NC

ShareLite™ PCS / AWS, WCS, BRS Diplexer, NO DC Pass (DC Ground), Dual Configuration, Side by Side, 4.3-10 Connectors

The FDPL Series of ShareLite diplexers are the smallest, most compact packaging of diplexers with the best performance available. Designed for use in small cell applications, dual and quad configurations in stacked/clamshell or side by side are available with all the same performance.

These diplexers enable feeder sharing between systems in the PCS and AWS (AWS-1, AWS-3, and upper AWS-4), WCS, BRS, EBS and LTE2.6 frequency bands. The RFS innovative cavity filter design provides a very low insertion loss while keeping the product extremely compact and lightweight. The usage of highly selective filters also guarantees a high isolation level of 40dB between ports, ensuring an interference-free environment for any technology deployed. The filter design also has built-in lightning protection for additional reliability. Designed to withstand the most severe outdoor environments, it also features an IP67 class protection with a vented enclosure to avoid any possible effects of condensation and pressure instability, thus providing a long lasting, extremely reliable solution for any network.

FEATURES / BENEFITS

- Designed for use with all USA mid band frequencies: PCS, AWS-1,-3, -4(U), WCS, BRS, and EBS
- Dual Unit for use with Xpol Antennas
- Low insertion loss - maximizes performance
- High level of rejection between bands - Protects against interferences
- Compact design - Eases installation and reduces tower loading
- In-line connector placement - flexible installation positioning
- 4.3-10 connectors - Reduce tower loading with connectors that are 40% smaller and lighter than 7/16 DIN connectors
- IP67 Class protection - exceptional reliability and environmental protection
- No DC Pass (DC Ground)



Technical features

GENERAL SPECIFICATIONS

Product Type		Diplexer/Cross Band Combiner
Application		PCS, AWS-1, AWS-3, AWS-4(U), WCS, BRS, EBS, LTE2.6
Configuration		ShareLite Dual diplexer, side by side, outdoor/indoor, No DC Pass (DC Ground)

ELECTRICAL SPECIFICATIONS

Branch		1, 2	
Frequency Range	MHz	1850-1915 1930-1995	1695-1780 2110-2700
Impedance	Ohms	50, 50	
Frequency Band		PCS, AWS, WCS, BRS, EBS, LTE2.6	
DC Pass		No, No	
Insertion Loss	dB	.25 typ., .20 typ.	
Return Loss	dB	22 (20 Min), 20 (18 Min)	
Power Handling Continuous, Max.	W	200, 200	
Rejection between bands	dB	40, 40	
3rd Order PIM	dBm (dBc)	-118 (-161) @ 2x43 max., -118 (-161) @ 2x43 max.	

TESTING AND ENVIRONMENTAL

Temperature Range	°C (°F)	-40 to 65 (-40 to 149)
Ingress Protection		IP 67
Environmental		ETSI 300-019-2-4 Class 4.1E
Lightning Protection		IEC61000-4-5 Level 4 / 5kA, 8/20us



FDPL4020AD4-NC

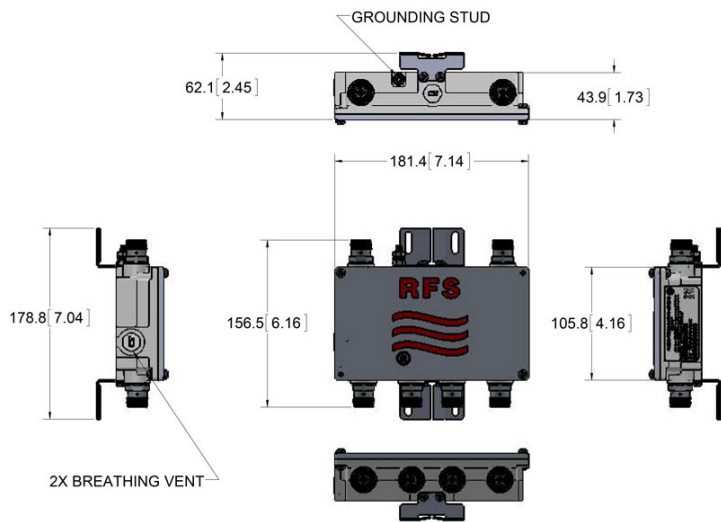
ShareLite™ PCS / AWS, WCS, BRS Diplexer, NO DC Pass (DC Ground), Dual Configuration, Side by Side, 4.3-10 Connectors

MECHANICAL SPECIFICATIONS

RF Connectors		4.3-10 Female; 4 ports in, 2 ports out
Weight	kg (lb)	1.4 (3.1)
Shipping Weight	kg (lb)	1.4 (3.1)
Dimensions, H x W x D	mm (in)	181 x 106 x 44 (7.14 x 4.16 x 1.73)
Shipping Dimensions, H x W x D	mm (in)	181 x 106 x 44 (7.14 x 4.16 x 1.73)
Volume	L	0.84
Mounting		Wall Mounting: With 4 screws (maximum 6mm diameter) Pole Mounting: With included clamp set 40-110mm (1.57-4.33)
Housing		Aluminum

SELECTION TABLE

Selection Guide Header		FDPL Selection Guide				
Type	Model Number	No DC Pass	DC Pass High Band	DC Pass Low Band	Full DC Pass	Connector
Type	Model Number	No DC Pass (DC Ground)	Connector			
Single	FDPL4020S4-NC	X	4.3-10			
Dual - Side by Side	FDPL4020AD4-NC	X	4.3-10			
Quad - Side by Side	FDPL4020AQ4-NC	X	4.3-10			
Dual - Stacked	FDPL4020CD4-NC	X	4.3-10			
Quad - Stacked	FDPL4020CQ4-NC	X	4.3-10			



[External Document Links](#)

[Notes](#)