



**FDPL4020AQ4-1C**

ShareLite™ PCS / AWS, WCS, BRS Diplexer, All DC Pass, Quad 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. This diplexer is ideal for use in small cell applications. Dual and quad configurations in stacked/clamshell or side by side are available with all the same robust 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 has a very low insertion loss while keeping the product extremely compact and lightweight. The usage of highly selective filters guarantees a high isolation level of 40dB between ports, ensuring an interference-free environment for any technology deployed. The filter design has built-in lightning protection for additional reliability. Able to withstand the most severe outdoor environments, it features an IP67 class protection with a vented enclosure to avoid any possible effects of condensation and pressure instability delivering 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
- Quad unit for 4X4 MIMO use
- 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
- All DC Pass



**Technical features**

**GENERAL SPECIFICATIONS**

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

**ELECTRICAL SPECIFICATIONS**

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

**TESTING AND ENVIRONMENTAL**

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



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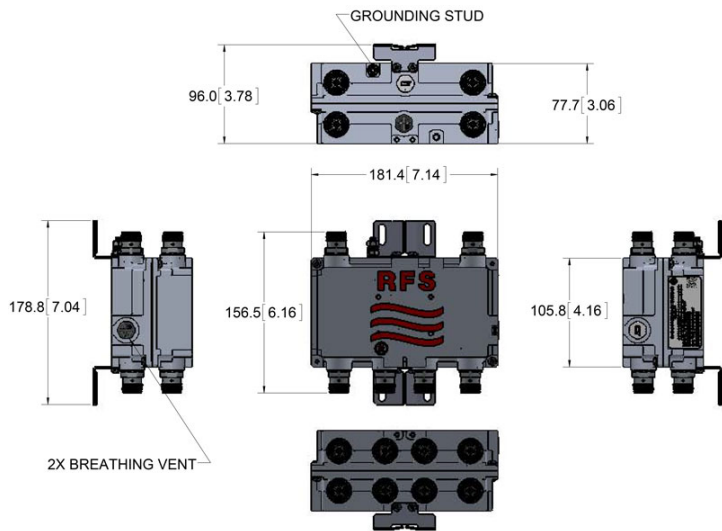
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**MECHANICAL SPECIFICATIONS**

RF Connectors		4.3-10 Female; 8 ports in, 4 ports out
Shipping Weight	kg (lb)	2.7 (6)
Dimensions, H x W x D	mm (in)	181 x 106 x 78 (7.1 x 4.2 x 3.1)
Shipping Dimensions, H x W x D	mm (in)	181 x 106 x 78 (7.1 x 4.2 x 3.1)
Volume	L	1.49
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**

Type	Model Number	All DC Pass	Connector
Single	FDPL4020S4-1C	X	4.3-10
Dual - Side by Side	FDPL4020AD4-1C	X	4.3-10
Quad - Side by Side	FDPL4020AQ4-1C	X	4.3-10
Dual - Stacked	FDPL4020CD4-1C	X	4.3-10
Quad - Stacked	FDPL4020CQ4-1C	X	4.3-10



External Document Links

Notes