

RFS Small Cell Diplexers

The smallest and lightest diplexers on the market bring maximum performance to the smallest spaces



The ultimate combination of performance and flexibility

As end-user demand continues to grow and technology continues to shrink, small cell solutions that can be concealed within streetlights and flagpoles or strand mounted are key to helping operators densify their networks and evolve to 5G. Incorporating small cell solutions into neutral host networks that provide a single infrastructure for multiple operators is proving to be an ideal way to take advantage of increasingly smaller spaces.

The RFS' FDPL Series of ShareLite™ small cell diplexers give site integrators the performance and flexibility needed when deploying shared infrastructure in the most space-constrained locations.

Innovative design increases reliability, decreases size and weight

RFS ShareLite small cell diplexers feature an innovative design that delivers best-in-class PIM levels (-161dBc) and very low insertion loss in the most compact and lightweight form factor on the market. The unique cavity filter design incorporates highly selective filters that guarantee 40dB of isolation between ports to eliminate interference for any technology deployed. RFS' robust small cell diplexers are also designed to withstand the most severe outdoor environments:

- IP67 class protection with a vented enclosure avoids any possible effects of condensation and pressure instability
- · Built-in lightning protection further increases reliability

The RFS FDPL Series of diplexers enable 4x4 MIMO configurations across the entire North American mid-band spectrum range (PCS/AWS-WCS-2.5 GHz).

Exclusive Features and Benefits

Superior Performance; Compact Design

 Smallest and lightest diplexers on the market

Simplifies installation, reduces space requirements and tower loading

 Best-in-class PIM and power handling, low insertion loss

Guarantees high performance

- 2x2 and 4x4 MIMO configurations
 Increases flexibility, enables network evolution
- 4.3-10 and NEX10 connectors
 Reduces assembly size and enables installation in the smallest enclosures
- IP67 class protection with a vented enclosure Increases reliability, ensures long life in the field

Product Specifications

Click the Model Number below to access the datasheet

Model Number	DC Pass	Rejection, dB	Weight, kg (lb)	Dimensions, H x W x D, mm (in)	RF Connectors			
Path 1: 1850-1915 & 1930-1995 MHz Path 2: 1695-1780 & 2110-2700 MHz								
Single Configuration				-				
FDPL4020S4-NC	No DC Pass	40	0.7 (1.6)	100 x 106 x 44 (3.9 x 4.1 x 1.7)	4.3-10 (F)			
FDPL4020S4-1C	All DC Pass							
FDPL4020S0-1C	All DC Pass				NEX10 (F)			
FDPL4020S0-NC	No DC Pass							
Dual Configuration								
FDPL4020AD4-NC	No DC Pass	40	1.4 (3.1)	181 x 106 x 44 (7.1 x 4.1 x 1.7)	4.3-10 (F)			
FDPL4020AD4-1C	All DC Pass							
FDPL4020AD0-1C	All DC Pass				NEX10 (F)			
FDPL4020AD0-NC	No DC Pass							
FDPL4020CD4-NC	No DC Pass			100 x 106 x 78 (3.9 x 4.1 x 3)	4.3-10 (F)			
FDPL4020CD4-1C	All DC Pass							
FDPL4020CD0-1C	All DC Pass				NEX10 (F)			
FDPL4020CD0-NC	No DC Pass				NEXTU (F)			
Quad Configuration								
FDPL4020AQ4-NC	No DC Pass	40	2.7 (6.0)	181 x 106 x 78 (7.1 x 4.1 x 3)	4.3-10 (F)			
FDPL4020AQ4-1C	All DC Pass							
FDPL4020AQ0-1C	All DC Pass				NEX10 (F)			
FDPL4020AQ0-NC	No DC Pass							
FDPL4020CQ4-NC	No DC Pass			100 x 106 x 155 (3.9 x 4.1 x 6.1)	4.3-10 (F)			
FDPL4020CQ4-1C	All DC Pass							
FDPL4020CQ0-1C	All DC Pass				NEX10 (F)			
FDPL4020CQ0-NC	No DC Pass							

NEW in 2019



Size Matters

In the world of small cells, size is a really big deal. To deliver small cell solutions in the most constrained spaces, RFS has engineered the world's smallest diplexer.

Designed and built with proven building blocks according to exacting



technical specifications including a lower rejection (30dB) between bands, this diminutive diplexer delivers all of the quality and performance RFS is known for in the tiniest possible package.

Play to win with the "smallest" small cell diplexers in the industry.

DC Pass	Rejection, dB	Weight, kg (lb)	Dimensions, H x W x D, mm (in)	RF Connectors				
Path 1: 1850-1915 & 1930-1995 MHz Path 2: 1695-1780 & 2110-2360 MHz								
No DC Pass	35 30	0.4 (0.9)	88 x 77 x 36 (3.5 x 3 x 1.4)	NEX10 (F)				
Dual Configuration								
No DC Pass	35 30	0.66 (1.4)	54 x 80 x 78 (2.1 x 3.1 x 3)	NEX10 (F)				
Quad Configuration								
No DC Pass	35 30	1.5 (3.3)	88 x 77 x 130 (3.5 x 3 x 5.1)	NEX10 (F)				
	Path 1: 1850-1 No DC Pass No DC Pass	Path 1: 1850-1915 & 1930-1995 MHz No DC Pass 35 30 No DC Pass 35 30	No DC Pass 35 30 0.4 (0.9) No DC Pass 35 30 0.66 (1.4)	No DC Pass 35 30 0.4 (0.9) 88 x 77 x 36 (3.5 x 3 x 1.4) No DC Pass 35 30 0.66 (1.4) 54 x 80 x 78 (2.1 x 3.1 x 3)				