

FX2300NF Multi-Service Cross-Band Coupler, 138-174/380-512 MHz

- Allows for the combination/separation of any 138-174 MHz with 380-512 MHz signals
- Add a new VHF BDA or repeater to an existing UHF DAS
- Enable sharing of feedlines and antennas
- High power handling for multi-service applications

Sinclair's FX2300 series cross-band couplers allow transmitters and receivers operating in frequency bands between 138-174 MHz and 380-512 MHz to share a common feedline for a multi-service base station and to share a common antenna in a Distributed Antenna System (DAS). Sharing a feedline amongst multiple discrete operating systems, all using different frequency bands, simplifies installation and maintenance, while reducing cost, space and tower/rooftop loading. Sharing one common antenna between multiple in-building systems, all using different frequency bands, will not only reduce installation and maintenance costs, but will also minimize the disruption to tenants and simplify new carriers to be added which enhances tenant appeal and retention.



Sinclair's cross-band couplers are ideal in expanding the functionality of Sinclair's SM300 and SM600 series antennas by enabling one antenna to service multiple and discrete wireless systems. With these cross band couplers, multiple radio systems can share the same antenna or can be added to service after the antenna is already installed.

The FX2300 series of cross-band couplers consist of low pass-band and high-pass filters with low insertion loss and high isolation. Each pass-band can handle 200W CW power. Although both low and high pass-bands are wideband, i.e. 138-174 MHz for the low pass-band and 380-512 MHz for the high pass-band, no field tuning is required for full band coverage.

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Region	United States	Europe, Middle East, and Africa	Canada, Caribbean, and Latin America	Asia-Pacific
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E-mail	salesusa@sinctech.com	salesuk@sinctech.com	salescan@sinctech.com	salesasia@sinctech.com

Electrical Specifications

Low Pass Frequency	MHz	138 to 174	
High Pass frequency	MHz	380 to 512	
Connectors		N-Female	
VSWR (max)		1.5:1	
Pass band insertion loss (Low pass)	dB	0.4	
Pass band insertion loss (High pass)	dB	0.4	
Power handling (Low pass)	W	200	*1
Power handling (High pass)	W	200	*2
Input/ Output Impedance	Ω	50	
Isolation (min)	dB	40	

Mechanical Specifications

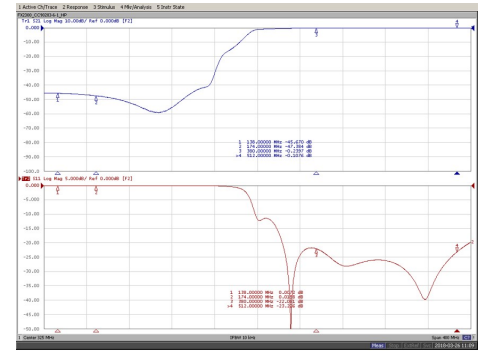
Dimensions (L x W x H)	in (mm)	4.7x2.4x1.5 (119x61x38)	*3
Weight	lbs (kg)	1 (0.45)	
Shipping dimensions	in (mm)	9x6x3 (229x152x76)	

Environmental Specifications

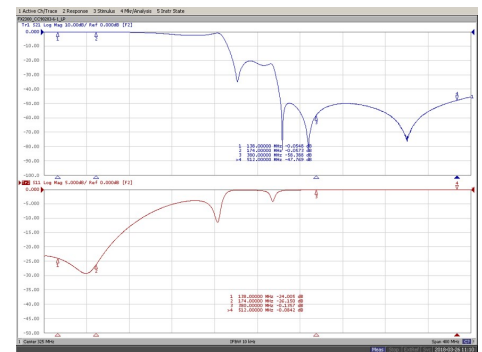
Temperature range	$^{\circ}$ F ($^{\circ}$ C)	-40 to +140 (-40 to +60)
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Notes

- *1 : CW max
- *2 : CW max
- *3 : Connectors excluded.



High Pass



Low Pass

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Product Specification Sheet
EPR 018494
Customer Tech Manual 006142

FX2300NF

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