



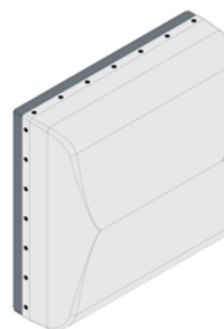
# SX04FRO230-01

NWAV™ X-Pol Antenna

4-port 2 ft 30° panel antenna 617-894, 1695-2700, 3400-4200 MHz:

2 ports 617-3980 MHz and 2 ports 3400-4200 MHz

- X-Pol, DAS, and Small Cell multi-port antenna
- Suitable for pole or building mount
- 4x4 MIMO for 3400-3980 MHz
- 2x2 MIMO for 617-3980 MHz
- Fast Roll Off pattern performance
- Cost-effective solution for neutral host locations



Electrical specification (min/max)	Ports 1, 2						
Frequency bands, MHz	617-798	824-894	1695-1880	1850-1990	1920-2180	2300-2400	2496-2690
Polarization	± 45°			± 45°			
Average gain, dBi	12.7	13.0	13.5	14.2	15.1	15.4	14.8
Horizontal beamwidth (HBW), degrees <sup>1</sup>	39.8°	33.7°	35.2°	28.7°	25.2°	24.2°	23.6°
Vertical beamwidth (VBW), degrees <sup>1</sup>	39.1°	33.5°	36.5°	29.6°	24.2°	23.4°	23.8°
Fixed electrical downtilt (EDT), degrees	0°						
Cross-polar isolation, port-to-port, dB <sup>1</sup>	25			25			
Max VSWR / return loss, dB	1.5:1 / -14.0			1.5:1 / -14.0			
Max PIM (3rd order, 2x20W) dBc	-153			-153			
Maximum input power port, watts	250			125			

Electrical specification (min/max)	Ports 1, 2			Ports 3, 4			
Frequency bands, MHz	3400-3550	3550-3700	3700-3980	3400-3550	3550-3700	3700-3980	3400-4200
Polarization	± 45°			± 45°			
Average gain, dBi	14.4	14.6	14.8	13.5	13.7	13.9	14.1
Horizontal beamwidth (HBW), degrees <sup>1</sup>	32	30	28	35	33	31	29
Vertical beamwidth (VBW), degrees <sup>1</sup>	39	37	35	43	41	39	37
Fixed electrical downtilt (EDT), degrees	0°			0°			
Cross-polar isolation, port-to-port, dB <sup>1</sup>	25			25			
Max VSWR / return loss, dB	1.5:1 / -14.0			1.5:1 / -14.0			
Max PIM (3rd order, 2x20W) dBc	-145			-145			
Maximum input power, watts	50			50			

<sup>1</sup> Typical value over frequency.

Mechanical specifications	
Dimensions height/width/depth, inches (mm)	24.0/ 24.0/ 8.5 (610/ 610/ 216)
No. of RF input ports, connector type, and location	4 x 4.3-10 female, back
RF connector torque	96 lbf-in (10.85 N·m or 8 lbf-ft)
Net antenna weight, lb (kg)	22.0 (9.9)
Weight with supplied bracket, lb (kg)	27.2 (12.3)
Shipping weight, lbs. (kg)	29.5 (13.4)
Supplied bracket kit	91900324 (included)
Mechanical down-tilt range	+/- 25° lateral (azimuth adjustment) and +/- 25° vertical (up/down tilt)
Rated wind survival speed, mph (km/h)	120 (193) with 91900324 bracket kit and 150 (241.4) with 919017 bracket
Frontal wind loading @ 150 km/h, lbf (N)	26.6 (118.4)
Equivalent flat plate @ 100 mph and Cd=2, sq ft	0.54

Front view	Back view	Side view
	<p>Refer to JMA weep hole modification guide at <a href="http://jmwireless.com">jmwireless.com</a> for mandatory drilling instructions.</p> <p>The SX antennas can be painted in accordance with the JMA painting guidelines at <a href="http://jmwireless.com">jmwireless.com</a></p>	

Array topology	Connector View									
<table border="1"> <thead> <tr> <th>Array ID</th> <th>Band</th> <th>RF port</th> </tr> </thead> <tbody> <tr> <td>R1/Y1/P1</td> <td>617-894/1695-2690/3400-3980</td> <td>1-2 1-2 1-2</td> </tr> <tr> <td>P2</td> <td>3400-4200</td> <td>3-4</td> </tr> </tbody> </table>	Array ID	Band	RF port	R1/Y1/P1	617-894/1695-2690/3400-3980	1-2 1-2 1-2	P2	3400-4200	3-4	
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R1/Y1/P1	617-894/1695-2690/3400-3980	1-2 1-2 1-2								
P2	3400-4200	3-4								

Ordering information	
Antenna model	Description
SX04FRO230-01	2F X-Pol 4-port panel 30°, 4.3-10
919055	Optional inverted mounting kit for 4.0-10.0 in. OD pole
91900313	Optional bracket kit for extended horizontal and vertical tilt ranges