



SX10FRO165-01

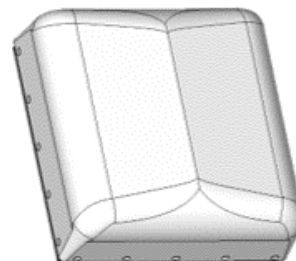
NWAV™ X-Pol Antenna

10-port 1 ft 65° panel antenna 617-960, 1695-2700, 3400-4200, 5150-5925 MHz:

2 ports 617-960 MHz, 4* ports 1695-2700 MHz, 4 ports 3400-4200 MHz, and 2 ports 5150-5925 MHz

*2 ports diplexed with 617-960 MHz

- X-Pol, DAS, and Small Cell multi-port antenna
- Suitable for pole or building mount
- 4x4 MIMO for 1695-2700 and 3400-4200 MHz
- 2x2 MIMO for 617-960 and 5150-5925 MHz
- Fast Roll Off pattern performance
- Cost-effective solution for neutral host locations



Electrical specification (min/max)	Ports 1, 2			Ports 1, 2, 3, 4				
Frequency bands, MHz	617-798	824-894	897-960	1695-1880	1850-1990	1920-2180	2300-2400	2496-2690
Polarization	± 45°			± 45°				
Average gain, dBi	8.2	7.0	6.8	11.7	12.0	12.8	13.0	13.6
Horizontal beamwidth (HBW), degrees ¹	77.3°	80.0°	81.0°	62.0°	65.0°	66.0°	68.0°	57.0°
Vertical beamwidth (VBW), degrees ¹	73.0°	82.5°	82.5°	28.0°	26.2°	24.2°	22.0°	20.7°
Fixed electrical downtilt (EDT), degrees	0°							
Cross-polar isolation, port-to-port, dB ¹	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 5, 6, 7, 8		Ports 9, 10	
Frequency bands, MHz	3400-4200		5150-5925	
Polarization	± 45°		± 45°	
Average gain, dBi	11.6		5.5	
Horizontal beamwidth (HBW), degrees ¹	68.0°		40.0°	
Vertical beamwidth (VBW), degrees ¹	45.7°		31.0°	
Fixed electrical downtilt (EDT), degrees	0°			
Cross-polar isolation, port-to-port, dB ¹	23		25	
Max VSWR / return loss, dB	1.5:1 / -14.0		1.5:1 / -14.0	
Max PIM (3rd order, 2x20W) dBc	N/A			
Maximum input power, watts	50		10	

¹ Typical value over frequency.

Note: Vertical beam upper side lobe at 5150-5250 MHz < -12 dB at > 30° above horizon

Mechanical specifications

Dimensions height/width/depth, inches (mm)	15.0/ 14.6/ 6.4 (381/ 370.84/ 162.56)
No. of RF input ports, connector type, and location	10 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)	9.5 (4.3)
Weight with supplied bracket, lb (kg)	14.7 (6.7)
Shipping weight, lbs. (kg)	21.6 (9.8)
Supplied bracket kit	91900324 (included)
Mechanical down-tilt range	+/- 25° lateral (azimuth adjustment) and +/- 50° vertical (up/down tilt)
Rated wind survival speed, mph (km/h)	120 (193) with 91900324 bracket kit
Frontal wind loading @ 150 km/h, lbf (N)	9.5 (42.291)
Equivalent flat plate @ 100 mph and Cd=2, sq ft	0.19

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

Array topology	Connector View																								
<table border="1"> <thead> <tr> <th>Array ID</th> <th>Band</th> <th colspan="2">RF port</th> </tr> </thead> <tbody> <tr> <td>R1/Y1</td> <td>617-960/1695-2700</td> <td style="background-color: red;">1-2</td> <td style="background-color: yellow;">1-2</td> </tr> <tr> <td>Y2</td> <td>1695-2700</td> <td colspan="2" style="background-color: yellow;">3-4</td> </tr> <tr> <td>P1</td> <td>3400-4200</td> <td colspan="2" style="background-color: purple;">5-6</td> </tr> <tr> <td>P2</td> <td>3400-4200</td> <td colspan="2" style="background-color: purple;">7-8</td> </tr> <tr> <td>O1</td> <td>5150-5925</td> <td colspan="2" style="background-color: orange;">9-10</td> </tr> </tbody> </table>	Array ID	Band	RF port		R1/Y1	617-960/1695-2700	1-2	1-2	Y2	1695-2700	3-4		P1	3400-4200	5-6		P2	3400-4200	7-8		O1	5150-5925	9-10		<p>R1 617MHz - 960 MHz Y1/Y2 1695 MHz - 2690 MHz P1/P2 3400 MHz - 4200 MHz O1 5150 MHz - 5925 MHz</p>
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O1	5150-5925	9-10																							

Ordering information	
Antenna model	Description
SX10FRO165-01	1F X-Pol 10-port panel 65°, 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