

CX18TRI265-5T

NWAV™ X-Pol Tri-sector Cantenna

18-port 2 ft 65° tri-sectored Hex cantenna with RET-controlled HB:

6 ports 698-960 MHz and 12 ports 1695-2700 MHz

- X-Pol, Small Cell, hex-port antenna
- Suitable for pole or building mount
- 2x2 MIMO low-band and 4x4 MIMO high-band
- 3-sectored configuration
- Dependent RET control for HB ports
- Suitable for LTE/UMTS/CDMA/GSM technologies
- Cost-effective solution for neutral host locations




Electrical specification (minimum/maximum)	Ports 1-6				Ports 7-18			
Frequency bands, MHz	698-798	824-960	1695-1880	1850-1990	1920-2180	2300-2500	2500-2690	
Polarization	± 45°				± 45°			
Average gain over all tilts, dBi	8.7	8.9	13.7	14.4	13.9	14.3	15.1	
Horizontal beamwidth (HBW), degrees	94°	92°	61°	53°	81°	76°	65°	
Vertical beamwidth (VBW), degrees ¹	36°	28°	15.4°	14.3°	12.9°	12.1°	11.0°	
Electrical downtilt (EDT) range, degrees	0° (FET)				2-8° (RET)			
Cross-polar isolation, port-to-port, dB ¹	25	25	25	25	25	25	25	
Max VSWR / return loss, dB	1.5:1 / -14.0				1.5:1 / -14.0			
Max passive intermodulation (PIM), 2x20W carrier, dBc	-153				-153			
Maximum input power per port, watts	30				30			
Maximum total input power, watts	540							

¹ Typical value over frequency and tilt

Ordering information	
Antenna model	Description
CX18TRI265-5T	2F X-Pol HEX TRI 65° LB 0° FET, 1695-2700 MHz 2-8° RET, 4.3-10
Optional accessories	
AISG cables	M/F cables for AISG connections
PCU-1000 RET controller	Stand-alone controller for RET control and configurations

Mechanical specifications

Dimensions height/diameter, inches (mm)	29.4/ 14 (746.8/ 355)
Antenna volume (cubic feet)	2.44
No. of RF input ports, connector type, and location	18 x 4.3-10 female, bottom
RF connector torque	96 lbf-in (10.85 N·m or 8 lbf-ft)
Net antenna weight, lb (kg)	38.6 (17.5)
Rated wind survival speed, mph (km/h)	150 (241)
Frontal wind loading @ 160 km/h, lbf (N)	47.6 (211.5)
Equivalent flat plate @ 100 mph and Cd=2, sq ft	0.96

Front view	End view
	<p>The 0 degree reference arrow corresponds to the 0 degree position in the antenna pattern file. Each antenna pattern file uses a top down orientation view (the patterns are viewed from the top of the antenna looking down).</p>

Notes on cylinder brackets	Mounting details
<ul style="list-style-type: none"> All CX* antennas come with the bottom mount bracket (marked as A) factory-installed (all factory testing is done with bracket attached) Hardware is included with each antenna to connect bottom bracket to different mounting systems. JMA cylinder brackets are compatible with bottom mount via universal antenna mount sleeve (marked as B), sold separately. To mitigate potential risk of PIM issues, the recommended torque values need to be applied. 	

Small Cell solutions and mounting systems (sold separately)			
Side Arm Mounting System	SC-BKT-SA-(color)	Wide Diameter Pole	SC-BKT-WTPE-(color)
Steel Pole Mounting System	SC-BKT-SLA (color)		

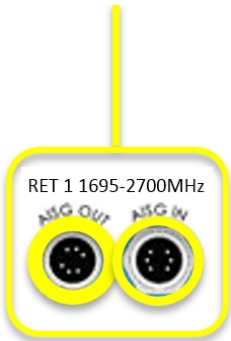
Remote electrical tilt (RET 1000) information

RET location	Integrated into antenna
RET interface connector type	8-pin AISG connector per IEC 60130-9
RET connector torque	Min 0.5 N·m to max 1.0 N·m (hand pressure & finger tight)
RET interface connector quantity	1 pair of AISG male/female connectors
RET interface connector location	Bottom of the antenna
Total no. of internal RETs high bands	3
RET input operating voltage, vdc	10-30
RET max power consumption, idle state, W	≤ 2.0
RET max power consumption, normal operating conditions, W	≤ 13.0
RET communication protocol	AISG 2.0 / 3GPP

RET topology

A single RET device controls each sector via the designated external AISG connector as shown below:

RET device	Band	RF port
1	1695-2700	7-10
2	1695-2700	11-14
3	1695-2700	15-18



Array topology

3 sets of radiating arrays

R1: 698-960 MHz
 Y1: 1695-2700 MHz
 Y2: 1695-2700 MHz

Band	RF port
1695-2700	7-8, 11-12, 15-16
698-960	1-6
1695-2700	9-10, 13-14, 17-18

