

SCCTR485-12x-x

4x4x4 MIMO Central Transceiver
4.7—5.0GHz / 12.8dBi



General Description

The StreamCaster Central Transceiver incorporates four Silvus StreamCaster MIMO radios into a single pod. The pod features a 16 antenna array with four overlapping sectors to give a full 360 degrees of 4x4 MIMO coverage. Powered by MN-MIMO technology, the StreamCaster Central Transceiver is ideal for high data rate mesh applications requiring long range blanket coverage. The SCCTR485-12x-x covers the 4.7—5.0GHz range and provides 12.8dBi of antenna gain in each sector. In addition to the 12.8dBi of antenna gain, RX Eigen Beamforming adds another 6-20dB of processing gain.

Features

- 4x StreamCaster™ 3800 MIMO Radios
- 4 Overlapping 4x4 Sectors
- Omnidirectional MIMO Transceiver Array
- Compatible with the StreamCaster™ family of MIMO Radios
- Ideal for City-Wide Mesh Deployments
- All Weather Operation
- Optional Mechanical Uptilt for Airborne Applications
- Optional Integrated High Power Amplifiers for Long Range Applications



Mechanical Specifications

Weight	~ 12 lbs.
Height	19"
Diameter	14.5"
Finish	White
Wind Loading	150 Mph
Data Connector	RJ45

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SC3800 Radio Specifications*

Waveform	Mobile Networked MIMO (MN-MIMO™)
Modulation	C-OFDM; BPSK, QPSK, 16-QAM, 64-QAM
Channel Bandwidth	5 & 20 MHz
Encryption	AES 128 or AES 256
Frequency Stability	1 PPM over temp -40° - +85° C
Tuning Step Size	1 KHz
Data Rates	65 Mbps UDP & 50 Mbps TCP
MAC Protocols	CSMA, TPMA, TDMA
Error Correction	1/2, 2/3, 3/4, 5/6
No. of Spatial Streams	1-4 (Per Sector)
No. of Antennas	4 (Per Sector)
Total Power Output	10mW—1W (Per Sector)
Latency	7 ms average
Sensitivity	Varies with MCS index; Maximum = -102 dBm (5MHz BW, MCS 0)



*Refer to SC3800 Specification Sheet for Complete Specifications

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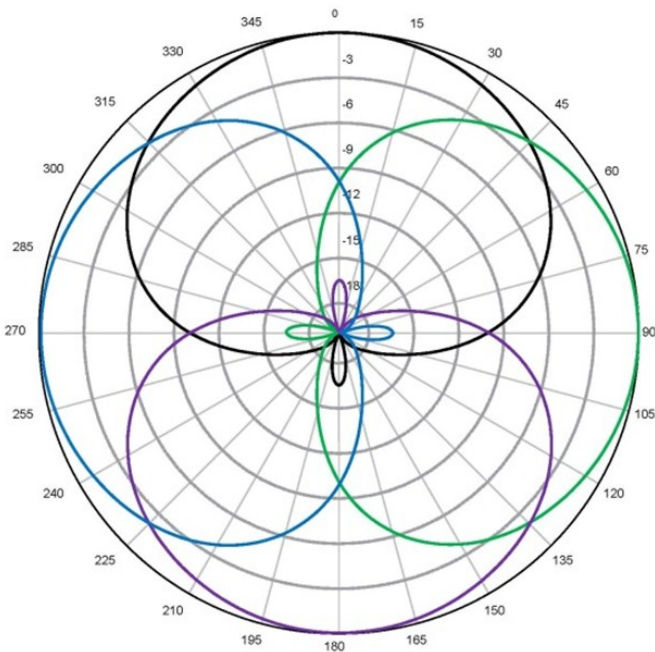


Antenna Array Specifications

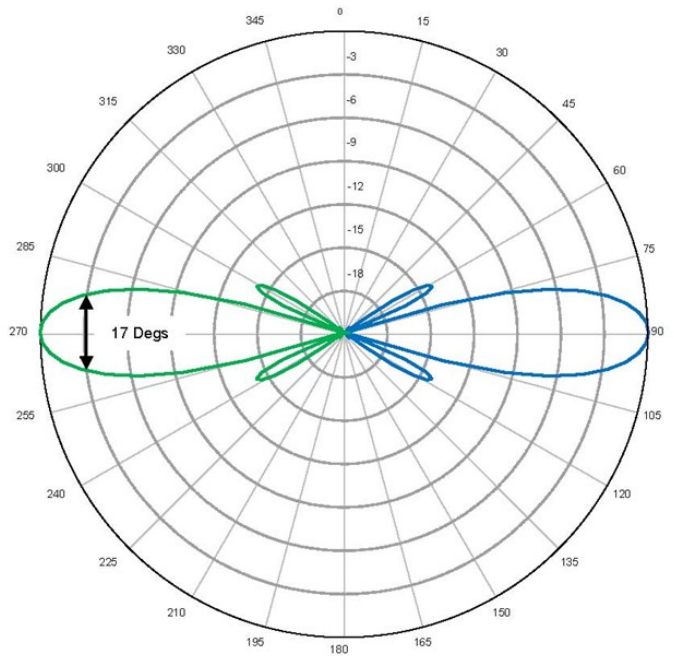
Frequency Range	4700—5000 MHz
Gain	12.8 dBi (Per Sector) (RX Eigen Beamforming adds another 6-20dB of processing gain)
Horizontal Beam Width	360° (116° Per Sector)
Vertical Beam Width	17°
Impedance	50 Ohms
Polarization	Optional (Vertical, Horizontal, LHCP, RHCP, Dual Linear or Dual Circular)



RF Antenna Patterns



Azimuth



Elevation

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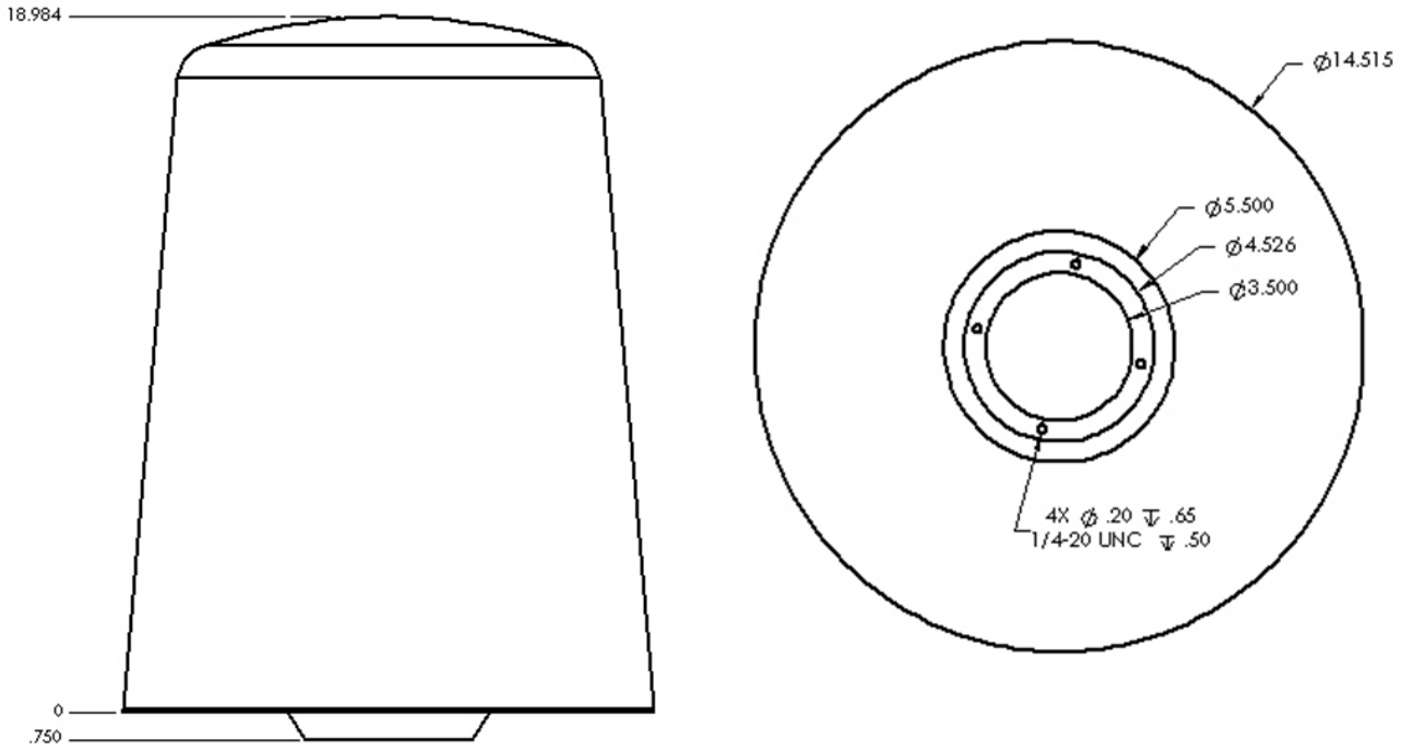
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Dimensions

*Dimensions in Inches



Part Number Legend

