

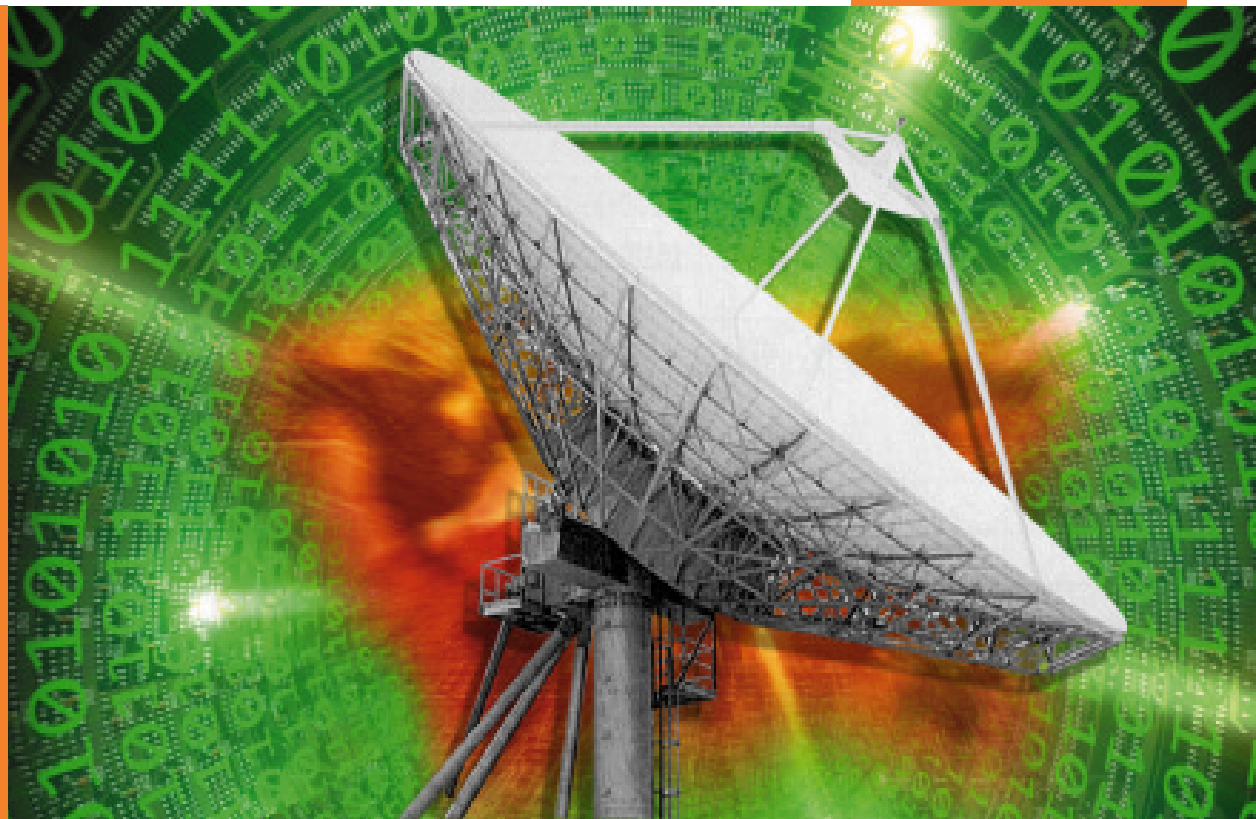
MODEL

18.3-METER &

21-METER KPC

C-BAND

ANTENNA



VertexRSI offers superiority and reliability with the field-proven 18.3-Meter and 21-Meter KPC C-Band transmit-receive antennas. Both of these antennas meet Intelsat standard "A" requirements and are installed in many domestic and international locations.

As with most VertexRSI antennas, various options are available for customization to customer requests. These antennas are offered as a complete specification-compliant Earth

Station Subsystems meeting the most recent revisions of Intelsat IESS-201. VertexRSI has designed, fabricated, installed, and tested many of the Intelsat antenna subsystems on virtually every continent worldwide. In addition to the 18.3-Meter and the 21-Meter antenna subsystems, VertexRSI offers custom engineering, site testing, and after-sales service and maintenance.

Key Features

- Intelsat Compliant
- Manual or Motorized Azimuth, Elevation, and Polarization Drive Systems
- Turnkey installation or Installation Assistance
- Reflector and Feed Deicing Systems Available
- Convenient Access Ladder & Platform
- Azimuth segment change without lifting jack housing

Antenna Products

MODEL 18.3-METER & 21-METER KPC C-BAND

Electrical	18.3-M C-Band 4-Port Circular Polarized Feed		21-M C-Band 4-Port Circular Polarized Feed	
	Receive	Transmit	Receive	Transmit
Frequency (GHz)	3.625 - 4.200	5.850 - 6.425	3.625-4.200	5.850-6.425
Antenna Gain at midband, dBi	56.1	59.6	57.6	61.0
VSWR	1.25:1	1.25:1	1.25:1	1.25:1
Beamwidth (Typical)				
-3 dB	0.27°	0.18°	0.22°	0.15°
-15dB	0.57°	0.38°	0.46°	0.32°
First Sidelobe Level (Typical)	-15 ±2 dB	-15±2 dB	-15 ±2 dB	-15 ±2 dB
Sidelobe Performance	Meets ITU-RS 580 or FCC 25.209		Meets ITU-RS 580 or FCC 25.209	
Antenna Noise Temperature				
5° Elevation	56° K		55° K	
10° Elevation	46° K		46° K	
20° Elevation	41° K		40° K	
Axial Ratio	0.50 dB	0.50 dB	0.50 dB	0.50 dB
Power Handling (Total)		10 KW		10 KW
Cross Polarization (Min)				
On Axis	30.7 dB	30.7 dB	30.7 dB	30.7 dB
Within 1 dB BW	30.7 dB	30.7 dB	30.7 dB	30.7 dB
Feed Port Isolation (Min)				
Rx/Tx (Rx Freq)	0 dB	-30 dB	0 dB	-30 dB
Tx/Rx (Tx Freq)	-30 dB	0 dB	-30 dB	0 dB
Rx/Rx , Tx/Tx (Same Band)	21 dB	23 dB	21 dB	23 dB
RF Specification	975-1078		975-1085	

Mechanical			Environmental	
Antenna Diameter	18.3 Meters (60.0 ft.)	21.0 Meters (69.0 ft.)	Wind Loading	
Antenna Type	Cassegrain		Operational	45 mph (72 km/h) gusting to 60 mph (97 km/h)
Reflector Construction	96 / 128 Panels, Stretch-Formed Steel Backup Structure		Survival	125 mph (200km/h) @ 58° F (15° C)
Mount Type	Elevation over Azimuth		Temperature Range	+5° F to +122° F (-15° C to +50° C) -22° F to +140° F (-30° C to +60° C)
Antenna Travel	18.3-M	21-M	* Rain	Up to 4 in. (10 cm) per hour
Elevation	0°- 90° Continuous	5°- 90° Continuous	* Relative Humidity	0 to 100% with condensation
Azimuth	180° in three 66° Segments	180° in three 66° Segments	* Solar Radiation	360 BTU/hr/ft ² (1000 Kcal/h/m ²)
Shipping Volume	12,200 cu. ft. (346 m ³) / 18,100 cu. ft. (513 m ³)		* Ice, Survival	1 in. (2.5 cm) radial
Shipping Weight	109,150 lbs. (49,510 kg) / 130,665 lbs. (59,270)		* Shock and Vibration tolerant to conditions encountered during shipment by commercial air, sea, and land. Atmospheric tolerant to conditions encountered in coastal regions and/or heavily industrialized areas.	

Options:

- Step Track or Monopulse Tracking Control System
- Linear and Circular Polarized Extended Bandwidth Feed Systems
- Low Noise Amplifiers
- Interfacility Waveguide Links
- Checkout and Full Intelsat Qualification Tests

Visit <http://www.tripointglobal.com> for online information

*Specifications subject to change without notice



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