

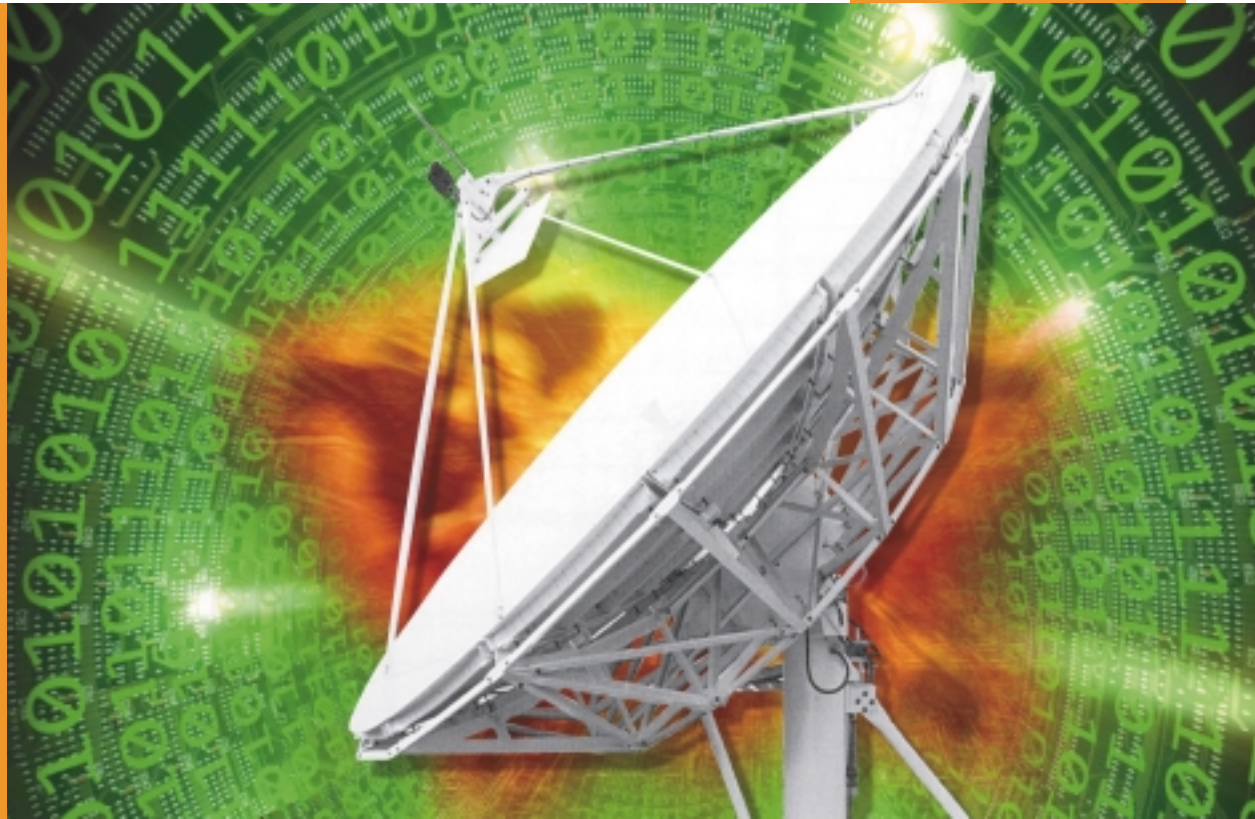
MODEL

7.2-METER

KXC / KXX

C & KU-BAND

ANTENNA



The VertexRSI 7.2-Meter C-Band and Ku-Band antennas offer superior performance for receive only and transmit-receive worldwide applications. The standard pedestal configuration provides a cost-effective solution, meeting the travel range for most requirements. These antennas meet FCC Regulation 25.209, IESS (Intelsat), or ITU-RS Recommendation 580 sidelobe specification.

Model 7.2 KXC, for C-Band operation, and Model 7.2 KXX, for Ku-Band operation, incorporate stretch-formed, doubly contoured panels with matched radials and hub assemblies for ease of field assembly. The reflectors and Elevation/Azimuth kingpost pedestals provide the stiffness and pointing accuracy required for both C-Band and Ku-Band operation. These antennas are designed for full orbital arc coverage and are readily adaptable to ground or rooftop installations.

Key Features

- All-Aluminum Reflector System
- High RF Performance
- Limited Motion Machine-Screw Jack Drive System
- Elevation over Azimuth Pedestal
- Galvanized Steel Finish
- Standard designs for many feed configurations and frequencies.

Antenna Products

| MODEL | Electrical | C-Band 4 Port Circular Polarized Feed | | Ku-Band 4 port Linear Polarized Feed | |
|---------------------------|--------------------------------|------------------------------------------|---------------|------------------------------------------|---------------|
| | | Receive | Transmit | Receive | Transmit |
| | 7.2-METER | Frequency (GHz) | 3.625 - 4.200 | 5.850 - 6.425 | 10.95 - 12.75 |
| KXC / KXX | Antenna Gain at midband, dBi | 47.9 | 51.7 | 56.8 | 58.3 |
| | VSWR | 1.25:1 | 1.25:1 | 1.30:1 | 1.30:1 |
| C & KU-BAND | Beamwidth (Typical) | | | | |
| | -3 dB | 0.68° | 0.44° | 0.23° | 0.20° |
| | -15dB | 1.43° | 0.92° | 0.48° | 0.42° |
| ANTENNA | First Sidelobe Level (Typical) | -14 ±2 dB | -14 ±2 dB | -14 ±2 dB | -14 ±2 dB |
| | Sidelobe Performance | Meets ITU-RS 580 or FCC 25.209 | | Meets Eutelsat, ITU-RS 580 or FCC 25.209 | |
| | Antenna Noise Temperature | | | | |
| | 5° Elevation | 52° K | | 80° K | |
| | 10° Elevation | 43° K | | 66° K | |
| | 20° Elevation | 37° K | | 57° K | |
| | Axial Ratio | 0.50 dB | 0.50 dB | | |
| | Power Handling (Total) | | 10 KW | | 2KW |
| | Cross Polarization (Min) | | | | |
| | On Axis | 30.7 dB | 30.7 dB | 35 dB | 35 dB |
| Within 1 dB BW | 30.7 dB | 30.7 dB | 35 dB | 35 dB | |
| Feed Port Isolation (Min) | | | | | |
| Rx/Tx (Rx Freq) | 0 dB | -30 dB | 0 dB | -50 dB | |
| Tx/Rx (Tx Freq) | -30 dB | 0 dB | -85 dB | 0 dB | |
| Rx/Rx, Tx/Tx (Same Band) | 21 dB | 23 dB | 30 dB | 30 dB | |
| RF Specification | 975-1039 | | 975-1145 | | |

Options:

- Two or four port Tx/Rx, linear and circular polarized feeds
- Reflector and feed deicing, full reflector systems with manual or automatic controls
- Manual or motorized azimuth, elevation, and polarized drive systems with controls and readouts
- Extended Azimuth Travel Pedestal (2-position, 200 degrees)

| Mechanical | | Environmental |
|------------------------|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Antenna Diameter | 7.2 Meters (23.7 ft.) | Wind Loading @ 58° F |
| Antenna Type | Cassegrain | Operational 45 mph (72 km/h) gusting to 60 mph (97 km/h) |
| Reflector Construction | 16 Panels, Stretch-Formed Aluminum Backup Structure | Survival 125 mph (200km/h) @ 58° F (15° C) |
| Mount Type | Elevation over Azimuth | Temperature Range |
| Antenna Travel | Standard Extended | +5° F to +122° F (-15° C to +50° C) |
| Elevation | 0° - 90° Continuous 0° - 90° Continuous | -22° F to +140° F (-30° C to +60° C) |
| Azimuth | 120° Continuous 200° in two 120° Segments | * Rain |
| Shipping Volume | 1,369 cu. ft. (38.8 m ³) | Up to 4 in. (10 cm) per hour |
| Shipping Weight | 8,721 lbs. (3,956 kg) | * Relative Humidity |
| | | 0 to 100% with condensation |
| | | * Solar Radiation |
| | | 360 BTU/hr/ft ² (1000 Kcal/h/m ²) |
| | | * Ice, Survival |
| | | 1 in. (2.5 cm) radial |
| | | * 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. |

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

*Specifications subject to change without notice



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Satellite Earth Station Antennas



Features

- One Antenna That Performs Like 37 Parabolics
- Market Proven Performance Since 1979
- Fixed Antenna With No Moving Parts to Service
- Commercial Quality Composite Construction



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Simulsat 7 Multibeam Earth Station

Simulsat Offers Multiple Satellite Reception

The Simulsat 7 Multibeam Earth Station is the world's only antenna that can simultaneously receive signals from up to 37 satellites within a 75 degree view arc. Parabolic antennas receive signals from one satellite at a time.

Programming Movement

In the past 15 years there have been over 5,000 satellite programming changes; inevitably many more changes will occur- especially as new satellites are being launched. By adding another feed (a quick & simple process) Simulsat users receive new programming without having to purchase another antenna.

Requires Less Space

Since it is the size of 1.5 parabolic antennas of equivalent performance, Simulsat curbs real estate costs. For those faced with high land costs, limited space, and zoning restrictions, Simulsat is the answer to such diverse problems.

Lower Overall Cost

The Simulsat is approximately equivalent in cost to three C-Band parabolic dishes. However, one Simulsat performs like 37 parabolic antennas. Since an increasing number of applications require multiple satellite reception, return on initial investment is immediate.

Simulsat Outperforms Retrofits

Many have retrofitted parabolic antennas to see up to five satellites simultaneously. Since parabolics have but one true focal point, adjacent satellites are offset, resulting in degraded signals on fringe satellites. Simulsat receives, with uniform performance, signals from all satellites within a 75 degree arc.

The Simulsat Solution

Simulsat 7 performs like 37 parabolics, making it the best alternative to "antenna farms." Simulsat is the world's only true multibeam and can view all satellites within a 75 degree arc, with similar performance on each satellite.

www.atci.net



SPECIFICATIONS: Simulsat 7 Multibeam Earth Station Antenna

ELECTRICAL

| | |
|------------------------------------|---------------|
| Frequency | 3.7 - 4.2 GHz |
| Gain (+/-1 dB across the view arc) | 46 dB |
| Beamwidth | 0.8 degree |
| VSWR | 1.3 |
| Feed Cross-Pol. Isolation | 35 dB |

MECHANICAL

| | |
|------------------------------|-------------------------------------|
| Reflector Size | 7.0 x 12.8 meters (23' x 42.0 feet) |
| Mount | Galvanized |
| Arc Coverage | 75 Degrees |
| Number of Simultaneous Feeds | Up to 37 satellites |
| Reflector Construction | Composite Fiberglass |
| Reflector Pieces | 3 Sections |
| Mount Type (Fixed) | Low Mount |

SHIPPING INFORMATION

| | |
|-----------------------------------|------------------------|
| Shipping Weight | 12,448 kg (27,444 lbs) |
| Max Weight (Off-Load Ship Crates) | 3,063 kg (6,752 lbs) |

ENVIRONMENTAL

| | |
|----------------------------|--------------------------------|
| Wind Loading - Operational | 144.8 km/h (90 mph) |
| Wind Loading - Survival | 201.2 km/h (125 mph) |
| Foundation Size (Area) | 6.1 x 9.1 meter (20 x 30 feet) |

FOUNDATION CONCRETE

| | |
|----------------------|--------------------------|
| 144.8 km/h (90 mph) | 16.5 meters (18.0 yards) |
| 201.2 km/h (125 mph) | 27.4 meters (30.0 yards) |