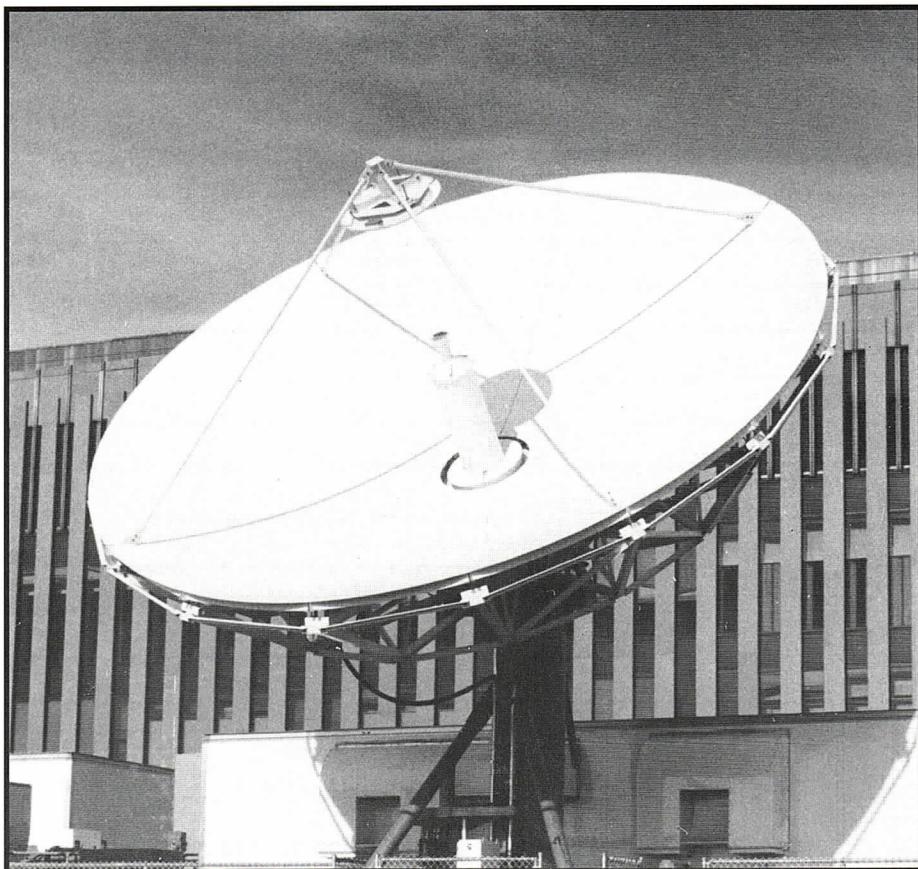




VERTEX 8.1-METER

MODEL 8.1 KPC & KPK (Kingpost Pedestal)

C - B A N D and K U - BAND



EARTH STATION ANTENNAS

Vertex has developed the 8.1 Meter C-band and Ku-band antennas to offer superior performance for receive only and transmit-receive worldwide applications.

Model 8.1 KPC (C-band) and Model 8.1 KPK (Ku-band) antennas incorporate stretch formed doubly contoured panels with matched radials and hub assemblies for ease of field assembly. The reflectors and azimuth/elevation kingpost pedestals provide the stiffness and pointing accuracy required for C-band and Ku-band operation. These antennas are designed for full orbital arc coverage and are readily adaptable to ground or rooftop installations.

The antennas meet FCC Regulation 25.209, IESS (INTELSAT), or CCIR Recommendation 580 sidelobe specification.

Options:

- Two port, three port, four port Rx/Tx linear and circular polarized feeds
- Full reflector and feed deicing systems with manual or automatic controls
- Manual or motorized azimuth, elevation and polarization drive systems with controls and readouts
- Step Track control system with readouts
- Turnkey installations or installation assistance
- Extended Azimuth Travel Pedestal System, 200° - 2 positions

8.1-METER KPC/KPK MECHANICAL SPECIFICATIONS

Azimuth Travel	120° continuous (standard) 200° 2 positions (optional)
Azimuth Travel Rate	.4°/sec. C-band; .2°/sec. Ku-band*
Elevation Travel	5° to 90° continuous (standard) 0° to 90° with 200° azimuth travel
Elevation Travel Rate	.4°/sec. C-band; .2°/sec. Ku-band*
Polarization Travel	±95° (Two ports) ±50° (Four ports)
Polarization Travel Rate	1.5°/second
Weight - Reflector	3,500 pounds (1,590 kg)
Weight - Pedestal	3,200 pounds (1,450 kg)
Shipping Weight (Typical)	10,880 pounds (4,935 kg)
Shipping Volume	2,011 cubic feet (57 m ³)
Reflector Structure	Aluminum
Pedestal Structure	Steel
Finishes	
Reflector Surface	Aluminum panels with heat-diffusing white paint
Pedestal	Hot-dip galvanized
Surface Accuracy	0.020 inch (.5 mm) Static
Foundation Size	22 ft x 22 ft x 1.5 ft (6.7 m x 6.7 m x 0.46 m)
Concrete Volume	27 cubic yards (20.7 m ³)
Reinforcing Steel	3,360 pounds (1,524 kg)
Soil Bearing Pressure	2,000 PSF (10,000 kg/m ²)

* Optional Rates Available

8.1-METER KPC/KPK ENVIRONMENTAL SPECIFICATIONS

Operational Winds	45 mph (72 km/h); gusts to 60 mph (97 km/h)
Survival Winds	125 mph (200 km/h) @ 58°F (15°C)
Ambient Temperature	Operational: +5° to +122°F (-15° to +50°C) Survival: -22° to +140°F (-30° to +60°C) Low temperature kits available
Rain (Operational and Survival)	Up to 4 in/h (10 cm/h)
Relative Humidity (Operational and Survival)	0% to 100% with condensation
Solar Radiation	360 BTU/h/ft ² (1000 Kcal/h/m ²)
Radial Ice (Survival)	1 inch (2.5 cm) on all surfaces or 1/2 inch (1.3 cm) on all surfaces with 80 mph (130 km/h) wind gusts
Shock and Vibration	As encountered during shipment by commercial air, sea or truck
Corrosive Atmosphere	As encountered in coastal regions and/or heavily industrialized areas
Seismic (Survival)	0.3 G's horizontal 0.1 G's vertical

NOTE: This document gives a description of only the prominent features of the product(s). Vertex reserves the right to change the specifications without notice.

VERTEX ANTENNA DIVISION

2600 LONGVIEW ST. • P.O. BOX 1277 • KILGORE, TX 75663 • TEL 903-984-0555 • FAX 903-984-1826 • EMAIL: vertexvadmktg@kilgore.net

- * Other Operational Frequencies Available
Power handling capability is based on an

Other Operational Frequencies Available
Power handling capability is based on and limited by the physical characteristics in the feed components. Microwave power at these levels may contribute to radiation hazard or exceed certain off-axis e.i.r.p. specifications.

NOTES: 1. All values are at the rear feed output flange

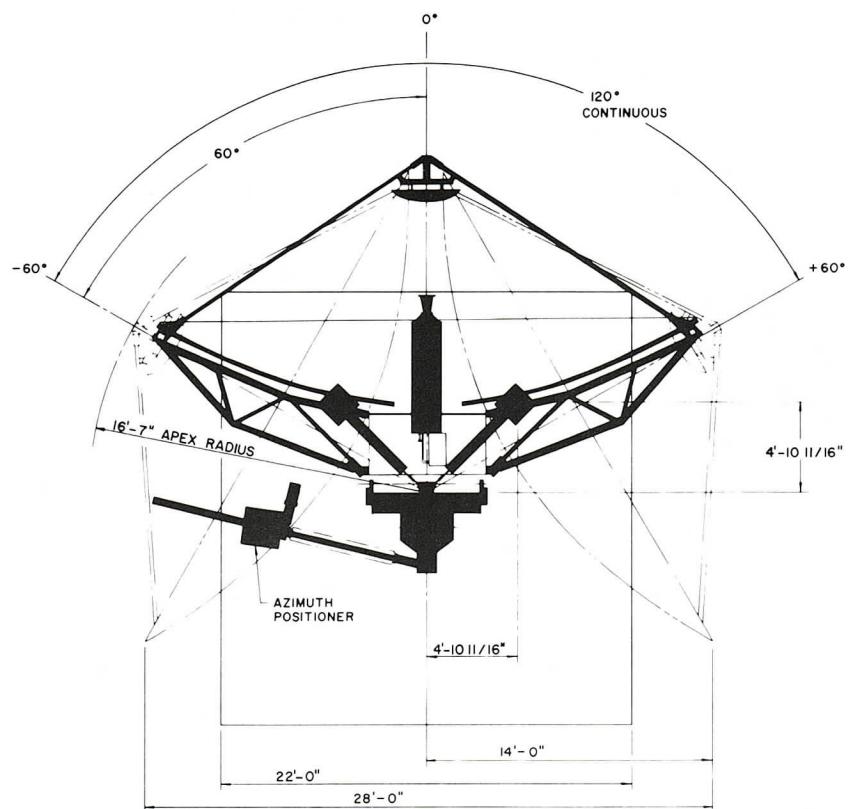
2. Values shown are predicted, but do not include allowance for measurement error.

• VERTEX ANTENNA DIVISION

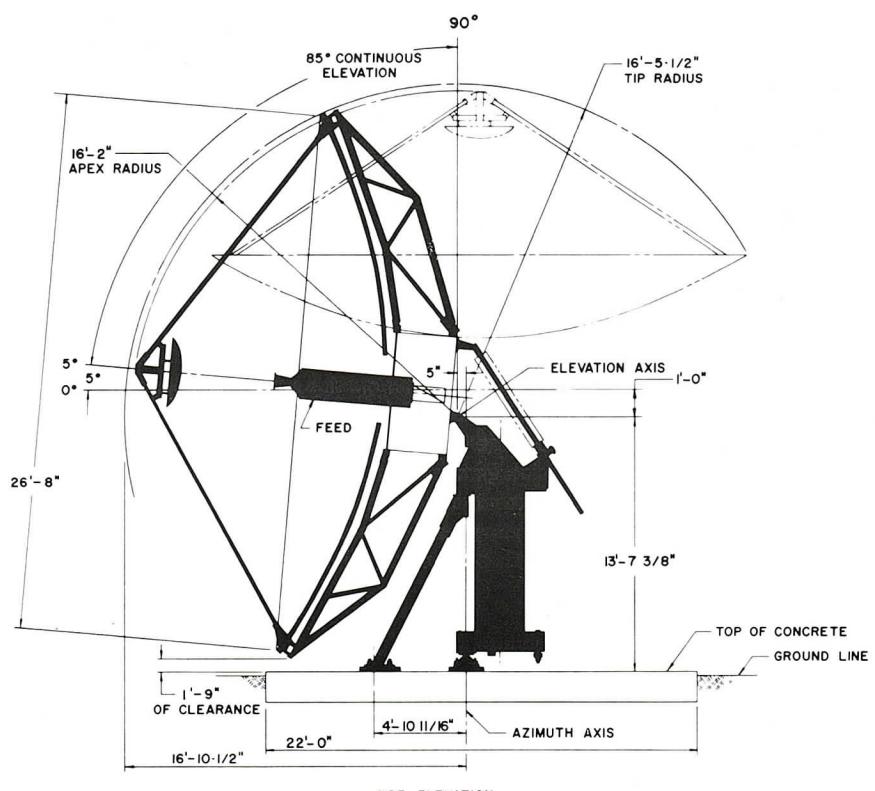
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VERTEX 8.1-METER

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PLAN VIEW



SIDE ELEVATION

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HUDSON-LONGVIEW-9076-38 (Rev. 1/97)