

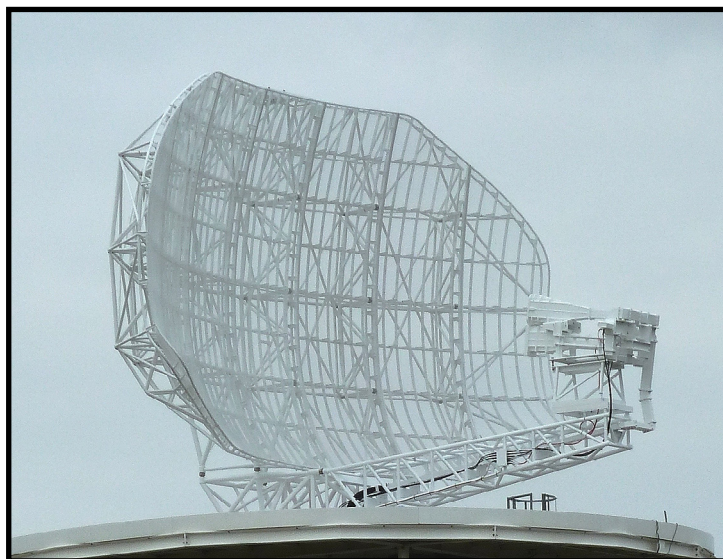
L-band Air Traffic Control Radar Antenna System

Antenna Features

- High Gain
- High and Low Radiating Beam
- Low Sidelobes
- Enhanced High Angle Performance
- Instantaneous Polarization Switching
- Weather Channel

Pedestal Features

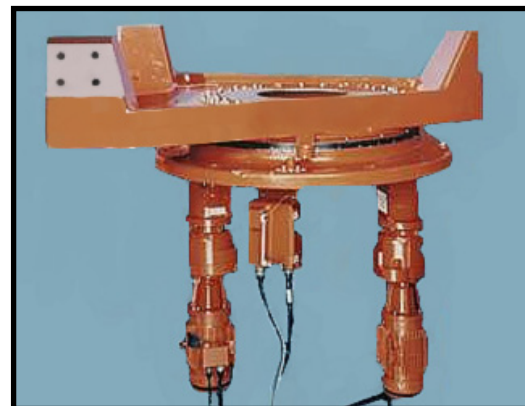
- Type Tested for Operation in Extreme Environment
- Developed from FAA Approved Base Design
- Versatile and Rugged
- Dual Helical Gearbox
- Selectable Rotation Speed
- Optional Control Unit and Rotary Joint



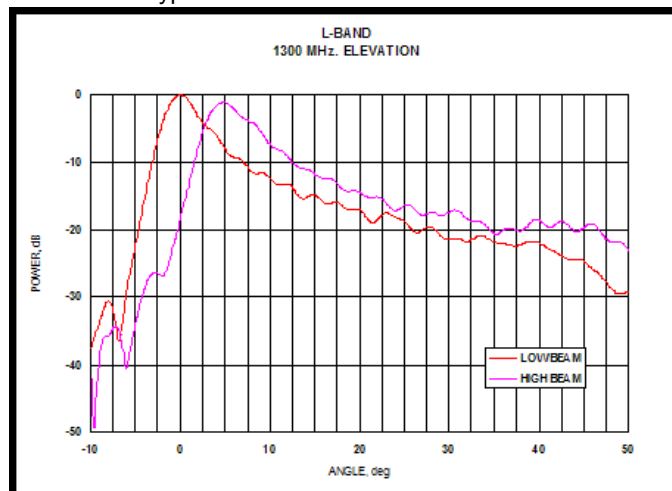
The Kratos L-band Radar Antenna and Pedestal System is a well-proven, off-the-shelf design. The system has been installed and in operation in major airports throughout the world.

The antennas and pedestals are manufactured in accordance with ISO9001 Quality Assurance to stringent specifications and perform to exacting standards demanded of them. Kratos has invested in extensive manufacturing tooling to ensure repeatability in production.

The Kratos L-band Primary Surveillance Radar Antenna System is a widely deployed, advanced antenna and pedestal with a proven record of performance and reliability. Drawing on its renowned advanced antenna and pedestal design, Kratos fabricates these surveillance radar antenna systems with proven performance advantages. Complete system solution with rotary joint, control unit and ancillary equipment are also available.



Typical Elevation Radiation Patterns



L-band ATC Antenna

Electrical

Frequency Band	1.25-1.35 GHz	
Low Beam		
Gain	36 dBi minimum	
VSWR	1.5:1 maximum	
Isolation	20 dB minimum	
Polarization	Switchable circular/linear	
ICR	20 dB	
Beamwidth	Az	EI
	1.2°	3.8°
Radiation Patterns	Az	EI
	26 dB max. 29 dB typical	Modified Cosecant Squared
High Beam		
Gain	33 dBi minimum	
VSWR	1.5:1 maximum	
Polarization	Switchable circular/linear	
ICR	18 dB	
Beamwidth	Az	EI
	1.25°	5.5°
Radiation Patterns	Az	EI
	25 dB Maximum	Modified Cosecant Squared

Mechanical

Feed Type	Prime focus offset feed system
Reflector Type	Modified Parabola, Aluminum Construction
Tilt Range	-2° to +6°
Weight, net, lbs (kg)	5,728 (2,598)
Dimensions (l x w x h), ft (m)	30.5 (9.3) x 5.6 (1.7) x 19.7 (6.7)

Pedestal

Dual Drive Motors, hp	5 or 7.5
Rotation Rate, rpm	Variable, 4 to 10
Peak Torque, ft-lb (dual drive)	4,200
Motor Frequency, Hz	50/60
Motor Voltage, Volts	208/380/415
Weight, net, lbs (kg)	6,012 (2,727)
Dimensions (l x w x h), ft (m)	6.2 (1.9) x 5.6 (1.7) x 5.6 (1.7)

Environmental (Antenna and Pedestal)

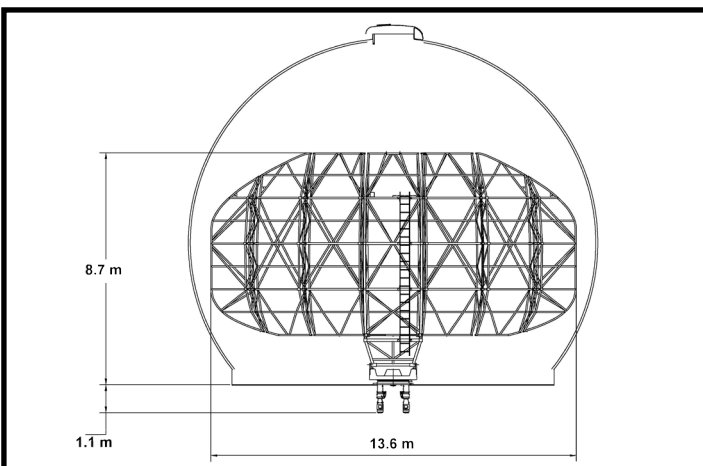
Operating	-50°C to +50°C
Non-operating	-50°C to +65°C
Radiation Pattern	Az 26 dB maximum
Humidity	up to 98% at 40°C
Operation	in a radome

Options

Rotary Joint
Dual Motor Controllers
Ladder Kit

Shipping

Antenna	
Weight, gross, lbs (kg)	11,045 (5,010)
Antenna Packing Dimensions (l x w x h)	
8 skids (each), ft (m)	22 (6.7) x 7.5 (2.3) x 7.5 (2.3)
1 skid, ft (m)	10.2 (3.1) x 7.5 (2.3) x 4.9 (1.5)
1 crate, ft (m)	8.5 (2.6) x 5.9 (1.8) x 6.6 (2.0)
Transportable via five closed ISO containers	
Pedestal	
Weight, gross, lbs (kg)	7,015 (3,182)
Dimensions (l x w x h), ft (m)	7.2 (2.2) x 6.9 (2.1) x 5.3 (1.6)
Transportable in a single closed ISO container	



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