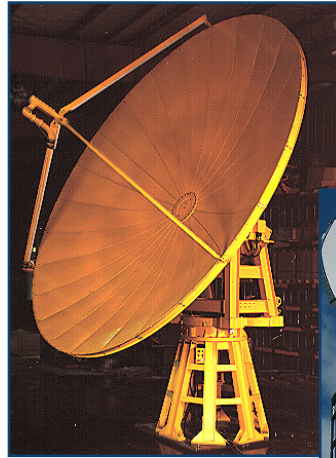


**Gear Driven WS-SLP10,
 WS-SLP13 Antenna/
 Pedestal System**

WS-SLP10 & WS-SLP13 Features

- Continuous Rotation in Azimuth
- Servo Controlled System
- Planetary Gear driven in Azimuth
- Centralized Lubrication System
- Linear Polarized S-Band Antennas



Ideal for demanding weather radar and remote weather surveillance applications, the WeatherSeeker SLP10 and SLP13 are the first in a family of advanced weather radar antenna/pedestal systems from Kratos. The WeatherSeeker Surveillance System is a high quality product designed and manufactured to ISO9001 processes. The system supports a number of different diameter antennas and radome system requirements. This new family of surveillance systems significantly lowers unit cost, cuts system weight, minimizes the size of the radome and enhances operational performance. WeatherSeeker's proven pedestal design incorporates improvements from technologies of both the NEXRAD Full Production Program and the FAA Air Traffic Control Programs supported by Kratos.

WeatherSeeker Surveillance Systems provide state-of-the-art brushless servo control electronics; use a precision commercial off the shelf (COTS) actuator in elevation, and a high quality compound planetary drivetrain in azimuth. This unique hybrid design provides for smooth positioning of the antenna in elevation and trouble free continuous rotation in azimuth.

The SLP10 and SLP13 are capable of continuous azimuth scanning and incremental stepping or sector scanning in elevation to support identification and tracking of meteorological phenomena from remote sites. The system is capable of positioning the radar antenna in any azimuth and elevation orientation within the specified travel limits to allow a high degree of accuracy in tracking storm movement.

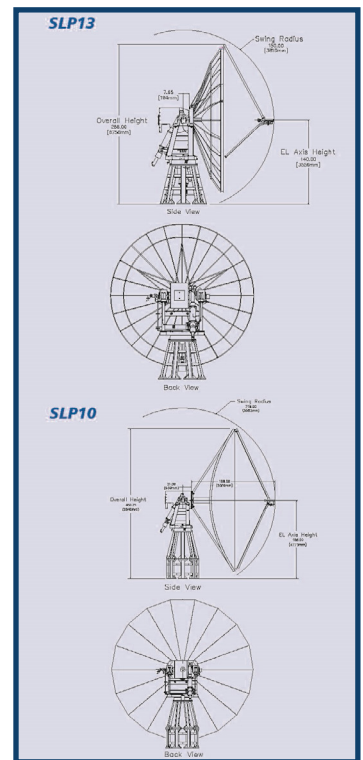
The SLP10 and SLP13 consist of an S-Band antenna, a high precision elevation over azimuth pedestal, an antenna control unit and a transformer unit.

Pedestal

The pedestal is based on FAA-approved designs and uses long-life, low maintenance brushless DC motors to power the azimuth and elevation drive assemblies. The azimuth drive consists of a compound planetary gearbox with integral ring gear and features low backlash and compliance. The elevation axis provides a high thrust/torque ratio which allows the motor to be directly coupled to the jack shaft thus avoiding backlash and losses of secondary gearbox.

Antenna Control Unit

The antenna control unit contains a single board controller that regulates system operation. It also contains the servo amplifiers used to drive the azimuth and elevation motors. Feed forward position loop compensation provides smooth velocity and accelerator profiling for more critical "step and settle" modes of operation.



Antenna

Each antenna has a lightweight aluminum reflector with a NEXRAD prime focus feed. The antenna and pedestal have been integrated to operate within a minimum diameter radome.

Features

- Based on FAA approved designs and technology
- Unique hybrid solutions reduce costs, improve performance
- Industry-leading reliability
- Advanced maintenance features
- 1.3° and 1.0° Beamwidths available

WeatherSeeker SLP13

- SLP13 pedestal 6.1 meter (20ft) diameter antenna
- S-Band linear polarized (C-Band also available)
- 1.3 deg beamwidth (S-Band)

WeatherSeeker SLP10

- SLP10 pedestal 8.5 meter (28ft) diameter antenna
- S-Band linear polarized (C-Band also available)
- 1.0 deg beamwidth (S-Band)

Applications

- Terminal Doppler Weather Radar

Additional Features

- Feed Forward Servo Compensation
- Easily Replaceable Azimuth Bearing
- Optional Hand-Held Controller
- Elevation Failsafe Brake
- Customized maintenance Hardware
- Viton Double-lip Seals
- Utility Junction Box Assembly
- Cross-guide Coupler
- Oil Level Sensor
- On-Axis Data Package
- Interlocked Stow Pins

Positioner Performance, WS-SLP10

Travel	
Azimuth	Continuos
Elevation	-3° to 92°
Velocity	
Azimuth	.05°/sec to 36°/sec
Elevation	.05°/sec to 15°/sec
Acceleration	
Azimuth	Rated: 18°/sec ² Max. 20°/sec ²
Elevation	Rated: 12°/sec ² Max. 20°/sec ²
Drive Capacity (peak at load)	
Azimuth	3,160 ft/lbs.
Elevation	7,500 ft/lbs.
Position Accuracy	
Azimuth	.10 degrees
Elevation	.10 degrees
Pedestal & Cwt. Wt.	15,787 lbs.

Positioner Performance, WS-SLP10

Travel	
Azimuth	Continuos
Elevation	-3° to 92°
Velocity	
Azimuth	.05°/sec to 36°/sec
Elevation	.05°/sec to 15°/sec
Acceleration	
Azimuth	Rated: 18°/sec ² Max. 20°/sec ²
Elevation	Rated: 12°/sec ² Max. 20°/sec ²
Drive Capacity (peak at load)	
Azimuth	3,160 ft/lbs.
Elevation	7,500 ft/lbs.
Position Accuracy	
Azimuth	.10 degrees
Elevation	.10 degrees
Pedestal & Cwt. Wt.	SLP13Lt. 9,672 lbs. SLP13 12,234 lbs.

Antenna Performance: Please Refer to Weather Radar Antenna Brochure for summary of all available Antenna options.

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Bulletin PED-05A 06/20
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