

malibu division

Model **HD-50 Series**

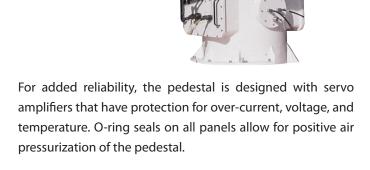
Antenna Pedestal

Product Data Sheet

Features:

- EL/AZ Configuration
- · Portable, Compact, Lightweight
- Rugged Construction
- Supports Solid Reflectors up to 2.4 meters (8 ft.)
- High Reliability and Accuracy
- High Torque and Low Backlash
- Rotary Joint and Slipring for Continuous Azimuth Rotation
- Fast Slew Rates
- Brushless DC Motors
- Supports L-Band through Ka-Band
- PC-based Automated Computer Control with P-Series ACU
- Camera (Optional)
- Acquisition-Aid Antenna (Optional)
- Compass and Inclinometer (Optional)
- Fiber-Optic Control (Optional)
- Transit Case (Optional)

A member of CPI Malibu's HD Series of harmonic drive pedestals, the HD-50 is designed to support solid reflectors in the range of 1.8 to 2.4 meters in winds of 65 MPH. High output torque with low backlash is accomplished with the use of planocentric gearboxes and brushless DC motors. The rugged gearboxes use built-in angular ball bearing construction, which improves the ability to support external loads, increases moment rigidity, and increases maximum allowable moment, resulting in increased reliability and a reduction in maintenance. The use of roller bearings throughout the gearbox yields low backlash (less than 1 arcmin).



The HD-50 provides both electronic and mechanical stops and all components are modular. Strategically placed and sized access hatches ensure that all pedestal components are easily accessible. Safety switches are implemented to protect the operator.

Related Data Sheets

Acquisition-Aid Antenna

Conically Scanning Feed

• P-Series Antenna Control Unit





Model **HD-50 SERIES**

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IB) (nominal)	26.3 dBi 27.2 dBi 27.8 dBi 29.4 dBi	28.8 dBi 29.7 dBi 30.3 dBi
IB) (nominal)	27.2 dBi 27.8 dBi 29.4 dBi	29.7 dBi 30.3 dBi
IB) (nominal)	27.8 dBi 29.4 dBi	30.3 dBi
IB) (nominal)	29.4 dBi	
IB) (nominal)		31.8 dBi
IB) (nominal)	30.1 dBi	
IB) (nominal)		32.6 dBi
	8.1°	6.1°
	7.6°	5.7°
	6.8°	5.1°
	6.3°	4.7°
	5.3°	4.0°
	4.9°	3.6°
	≤ -18 dBp	≤ -20 dBp
	3.3 dB/°K	5.8 dB/°K
	3.9 dB/°K	6.4 dB/°K
	4.9 dB/°K	7.4 dB/°K
	5.5 dB/°K	8.0 dB/°K
	7.0 dB/°K	9.5 dB/°K
	7.8 dB/°K	10.3 dB/°K
	Elevation/Azimuth	
		≤ 20°/sec
		≤ 20°/sec²
Azimuth	360° continuous with slipring	
ravel		· -
Continuous	900 ft. lbs.	
	1,800 ft. lbs.	
	2.0 x 10-5 radians/ ft. lbs.	
Operating	-20°C to +52°C	
· •	-54°C to +71°C	
	Up to 100%, including condensation	
	Up to 4 Inches per Hour	
	One-half Inch, Radial	
Operating	80 km/h / 50 MPH (gusting to 105 km/h / 65 MPH)	
	1	-
Storage	1	500 kg / 1100 lbs.
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	Azimuth Elevation Continuous Peak Operating Storage Operating Storage	4.9°

- Other frequency bands available upon request.
 Simultaneous orthogonal linear polarizations available.

3. G/T specifications are nominal and may vary based upon system configuration.

*Specifications subject to change.

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