

Model **HD-30T Series** Dual Axis Ground Data Terminal

Product Data Sheet

Features:

- Available in X, Ku, Dual X & Ku Band
- 1.2 meter (4 ft.) Reflector
- Full Duplex-CDL Band
- Cassegrain Configuration
- Auto Tracking Feed Assembly
- Lightweight Pedestal Assembly
- Three (3) Transit Cases
- MIL-STD-810F Compliant
- MIL-STD-461E Compliant
- UDP/IP Command and Control Interface
- CPI Malibu FLAPS™ 1.0 meter Reflector (Optional)
- 18° Beam Acquisition-Aid Antenna (Optional)
- Serial Control Interface (Optional)

The HD-30T series tactical Ground Data Terminal was designed for quick deployment in harsh environments. The HD-30T can be deployed in less than 15 minutes with no hand tools required. A standard 1.2 meter segmented parabolic reflector provides high antenna gain and a quickly deployable 1.0 meter FLAPS™ Reflector is also an option for the HD-30T. The system's Antenna Control Unit, Servo Amplifiers and Power Supplies are self-contained in the pedestal base. Operator interfaces for command and control are provided through an ethernet UDP/IP port and a serial control interface is optional.



Related Data Sheets

• **AT-10 Single Axis
Directional Antenna**

• **AT-20 Dual Axis
Directional Antenna**

• **AT-23 Dual Axis
Directional Antenna**

Model HD-30T SERIES

Specifications*

KEY PERFORMANCE VALUES WITH STANDARD HARDWARE COMPLEMENT

RF/Electrical Parameters		X Band	Ku Band
Frequency Range		9.7 - 10.5 GHz	14.4 - 15.35 GHz
Antenna Aperture Size		1.2 meter	1.2 meter
Antenna Gain		≈ 37 dBi	≈ 41 dBi
Axial Ratio		< 2.5 dB	≤ 2.0 dB
-3 dB Beamwidth		≈ 1.6°	≈ 1.2° (Nominal)
Antenna VSWR		<2:1	≤2:1
Polarization		RHCP	RHCP
Sidelobe Performance		≤ -14 dBc	≤ -14 dBc
Primary Power	Idle	+ 28 VDC, 1.5 AMPs (Nominal)	
	Tracking	+ 28 VDC, 6.5 AMPs (Nominal)	
Mechanical Parameters			
Environmental Qualifications		MIL-STD-810F	
EMI/RFI		MIL-STD-461E	
Velocity		≥ 20°/second	
Acceleration		≥ 20°/second ²	
Pointing Accuracy		< 0.75°	
Operational Wind Speed		≤ 41 MPH (Full Autotrack)	
GPS		Optional	
IMU/AHRS		Optional	
Environmental Parameters			
Temperature	Operating	-40°C to +55°C +1120 w/m ² solar (with warm-up)	
	Storage/Transit	-40°C to +71°C +1120 w/m ² solar	
Wind Loading		Operational to 41 MPH	
Humidity		100% RH per AR-70-38	
Altitude	Operating	Sea Level to 10,500 ft. MSL	
	Non-Operating	≤ 40,000 ft. MSL	
Rain	Operating	Up to 2" / Hour	
	Non-Operating	Up to 4" / Hour	
Snow Load		10 lbs./ft. ² returnable to operation in 15 min.	

*Specifications subject to change.