



Model 8010D is a 7.3 meter earth station antenna that provides high gain and excellent pattern characteristics through the use of precision stretch-formed reflector panels and advanced computer-shaped Gregorian optics.

Corrugated conical feed horns ensure excellent antenna gain and sidelobe performance. Sixteen high-strength aluminum panels are durable enough to withstand a range of environmental conditions. Antenna panels mount to radial trusses attached to a central hub without the need for field alignment. The hub also provides a protective enclosure for sensitive electronics.

The 7.3 meter earth station antenna includes a TORQUETUBE™ mount with continuous 110° of motorized azimuth coverage in three overlapping sectors. An optional mount configuration is available, that provides continuous 180° coverage. The high-strength structural steel mount employs an elevation-over-azimuth geometry for easy pointing to any satellite within the visible orbital arc. The mount's stiff, rugged construction provides pointing accuracy for continuous operation, even under adverse wind conditions.

The TORQUETUBE design is the most cost-effective way to achieve superior pointing accuracy. An added bonus is the ease with which the ground level azimuth actuator sectors are changed. The hot-dip galvanized mount, all aluminum reflector, and stainless steel and galvanized hardware assures maximum product life.

7.3 METER AT-A-GLANCE

- » Compliant with FCC, ASIASAT, INTELSAT, EUTELSAT ITU and more
- » Meets INTELSAT Standard F-2, F-3 and E-3 requirements
- » High-efficiency shaped Gregorian optics
- » Use with C-band or Ku-band systems (custom frequency options—consult factory)
- » Add our 8860/8861A/8862 Antenna Controller with patented AdaptTrack for accurate tracking
- » Minimal satellite repointing time with high-speed motorized option
- » Generous electronics space in hub
- » Precision high-strength structural steel TORQUETUBE™ mount
- » Protected environment for LNAs/LNBs
- » CE compliant

Options

- » 180° continuous azimuth
- » Workplatform and ladder
- » Hub light and fan
- » Hub cover
- » Cross-axis transmit waveguide (2 kW C-band, 700 W Ku-band)
- » Hub heater
- » Waveguide loads
- » Crossguide couplers
- » Lightning protection
- » Aircraft warning lights
- » De-icing

Model 8010D 7.3 Meter Earth Station Antenna

SPECIFICATIONS

ELECTRICAL

	C-band	Ku-band
Operating Frequency¹ (GHz)		
Transmit	5.850 to 6.425	14.0 to 14.5
Receive	3.625 to 4.2	10.95 to 12.75
Gain (midband, ref. feed horn)		
Transmit	52.0 dBi	58.8 dBi
Receive	47.9 dBi	57.4 dBi
Feed Insertion Loss (dB)		
DP—2-Port RX/RX Linear		
Receive	0.050 dB	0.22 dB
RT—2-Port RX/RX Linear		
Transmit	0.20 dB	0.21 dB
Receive	0.30 dB	0.22 dB
4PL—4-Port RX/RX Linear		
Transmit	0.15 dB	0.20 dB
Receive	0.15 dB	0.35 dB
4PC—4-Port RX/RX Circular		
Transmit	0.17 dB	N/A
Receive	0.17 dB	N/A
VSWR		
Transmit	1:3:1	1:3:1
Receive	1:3:1	1:3:1
Beamwidth (-3 dB)		
Transmit	0.44°	0.19°
Receive	0.64°	0.22°
First Sidelobe Level		
	14.0 dB	14.0 dB
Antenna Noise Temp (typical, ref. feed horn)		
Elevation		
10°	27 K	36 K
20°	20 K	27 K
30°	17 K	25 K
40°	14 K	24 K
Power Handling Per Transmit Port²		
	2.5 kW (CW)	1 kW (CW)
Cross Pol Isolation (on axis, min.) (linear)		
Transmit	35 dB	35 dB
Receive	35 dB	35 dB
Feed Port Isolation (4-port linear)		
RX/TX (RX-band)	85 dB	50 dB
TX/RX (TX-band)	85 dB	85 dB
RX/RX	21 dB	35 dB
TX/TX	18 dB	35 dB
Axial Ratio (circular polarization)		
	1.06:1	
Radiation Pattern		
Meets standards set by FCC, INTELSAT, ASIASAT, EUTELSAT, ITU and others.		

MECHANICAL

Antenna Diameter	7.3 meter; 288 in.
Antenna Type	Shaped dual reflector
Reflector Construction	16 aluminum panels on hub and truss structure
Mount Type	Elevation over azimuth
Antenna Travel	
» Elevation	0° to 90° continuous ³
» Azimuth	180° in 3 overlapping 110° sectors
» Optional	180° continuous
Polarization Adjustment	
» Manual	360°
» Motorized	±90°
» Antenna Travel Rate (Motorized)	Various—consult factory
Feed Interface	
» Transmit C-band	CPR-137G
» Transmit Ku-band	WR-75
» Receive C-band	CPR-229G
» Receive Ku-band	WR-75
Weight C-band	
» Net	2,218 kg; 4,880 lb
» Ship	3,206 kg; 7,050 lb
» Shipping Volume	25 m ³ ; 880 ft ³

ENVIRONMENTAL

Wind Loading	
» Operational	121 km/h; 75 mph gusting to 144 km/h; 90 mph
» Survival	193 km/h; 120 mph, stowed, 15° C, no ice
Temperature Range	
» Operational	-40° to +65° C; -40° to +150° F
Atmospheric Conditions	Salt, pollutants and corrosive contaminants as found in coastal and industrial areas



CONTACT

SALES

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