



Model 8060 At-A-Glance

- Compliant with FCC, ASIAsat, INTELSAT, EUTELSAT ITU and more
- Meets INTELSAT Standard F-2 and E-3 requirements
- High-efficiency shaped Cassegrain optics
- Use with C-, Extended C-, or Ku-band systems (optional combined feed — dichroic)
- Add our 8860/8861A/8862 Antenna Controller with patented AdaptTrack for accurate tracking
- Minimal satellite repointing time with high-speed motorized option
- Protected environment for LNAs/LNBs in hub
- CE compliant

Model 8060 6.1 Meter Earth Station Antenna

Model 8060 is a 6.1 meter earth station antenna that provides superior performance through the use of precision stretch-formed reflector panels and a dual-shaped Cassegrain feed. 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.

The hub also provides a protective enclosure for sensitive electronics. The high-strength structural steel tripod 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.

Model 8060 includes a galvanized structural steel tripod mount with a continuous 115° of motorized azimuth coverage in three overlapping sectors. An optional TORQUETUBE™ configuration adds continuous 180° motorized azimuth coverage.

Options

- 180° continuous azimuth
- Multiband feeds
- Cross-axis transmit waveguide (2 kW C-band, 700 W Ku-band)
- Waveguide loads
- Crossguide couplers
- Hub cover
- Hub heater
- Lightning protection
- De-icing

SPECIFICATIONS

ELECTRICAL

	C-band	Ku-band
Operating Frequency (GHz):		
Transmit	5.850 – 6.425	14.0 – 14.5
Receive	3.625 – 4.2	10.95 – 12.75
Gain (Midband, Ref. Feed Horn):		
Transmit	49.8 dBi ³	57.3 dBi ⁴
Receive	46.0 dBi ¹	56.1 dBi ²
Feed Insertion Loss (dB):		
DP – 2-Port RX/RX Linear:		
Receive	0.051 dB	0.12 dB
RT – 2-Port RX/TX Linear:		
Transmit	0.10 dB	0.10 dB
Receive	0.10 dB	0.12 dB
4PL – 4-Port RX/TX Linear:		
Transmit	0.15 dB	0.27 dB
Receive	0.15 dB	0.27 dB
4PC – 4-Port RX/TX Circular:		
Transmit	0.17 dB	N/A
Receive	0.17 dB	N/A
VSWR:		
TX	1.3:1	1.3:1
RX	1.3:1	1.3:1
Beamwidth (-3 dB):		
Transmit	0.56°	0.25°
Receive	0.86°	0.30°
First Sidelobe Level:		
	14.0 dB	14.0 dB

Radiation Pattern:

C- and Ku-band: Meets standards set by FCC, INTELSAT, ASIASEAT, EUTELSAT, ITU and others.

Antenna Noise Temp (Typical, Ref. Feed Horn):

Elevation	C-band	Ku-band
10°	27 K	36 K
20°	20 K	27 K
30°	17 K	25 K
40°	14 K	24 K

Power Handling Per TX Port:

5 kW (CW) 2 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
TX/TX	21 dB	35 dB
RX/RX	18 dB	35 dB

Axial Ratio:

(Circular Polarization) 1.06:1

MECHANICAL

Antenna Diameter: 6.15 meters (242 inches)
Antenna Type: shaped dual reflector
Reflector Construction: 16 precision stretch formed steel panels on galvanized steel hub and truss structure
Mount Type: elevation-over-azimuth
Antenna Travel:
 Elevation: 0° to 90° continuous⁵
 Azimuth: 225° in 3 overlapping 120° 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: 1,360 kg (3,000 lb.)
 Ship: 2,630 kg (5,800 lb.)
Shipping Volume: 14.2 cubic meters (500 cubic feet)

ENVIRONMENTAL

Wind Loading:

Operational: Drive-to-stow 129 km/h (80 MPH)
 177 km/h (110 MPH) any position, 15° C, no ice
 Survival: 201 km/h (125 MPH), stowed, 15° C, no ice

Temperature Range:

Operational: -40° C to +65° C (-40° F to +150° F)

Atmospheric Conditions:

Salt, pollutants and corrosive contaminants as found in coastal and industrial areas



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NOTES:

- ¹ Referenced at 3.95 GHz
- ² Referenced at 11.95 GHz
- ³ Referenced at 6.175 GHz
- ⁴ Referenced at 14.25 GHz
- ⁵ Minimum elevation angle is 5° with the hot air deicing option installed