

1200 AUTOPOINTING FLYAWAY

Technical Specifications



The 1.2 m Flyaway Autopointing Antenna System with the iTNS controller has the following Key Features:

- One Button Auto-Pointing Controller
- 3 Axes Motorization
- Supports Manual Control
- Airline Checkable
- Captive Hardware/Fasteners
- Setup Time Less than 15 Minutes, One Person
- Leveling capability for Uneven Surfaces
- 2 Pieces Dual Skin
- Supports Ku Band

RF Interface

Radio Mounting.....	Feed Arm
Axis Transition.....	Twist-Flex Waveguide
Waveguide.....	WR75 Cover Flange Interface
Coaxial.....	RG6U from Feedhorn to Base Connector

Environmental

Wind Load	
Operational	
No Ballast or Anchors.....	40 km/hr
With Ballast or Anchors.....	72 km/hr
Survival (with Ballast/Anchors).....	145 km/hr
Solar Radiation	360 BTU/h/sq. ft.
Temperature	-58° F to 140° F (-50° C to 65° C)
Rain	1.3 cm/h

Maximum Mount Rotation

Azimuth.....	+/- 75°
Elevation.....	5 - 80°
Polarization.....	+/- 95°
Elevation Deploy Speed.....	Variable 2° / sec typ
Azimuth Deploy Speed.....	Variable 15° / sec typ, 10° / sec typ
Peaking Speed.....	0.2° / sec

Motors

Electrical Interface.....	12 VDC 15A Max.
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Mechanical

Reflector.....	1.2 m Offset Feed
Mount Geometry.....	Elevation over Azimuth
F/D Ratio.....	0.635
Offset Angle.....	22.0°
Antenna Optics.....	Single Offset

Electrical

Rx & Tx Cables.....	2 RG6 cables (10m each)
Control Cables	
Standard.....	10m Ext. Cable
Optional.....	up to 75m available

Packaging Cases

- Case 1: 2 piece reflector, 123x50x46 cm; 30kg
- Case 2: Positioner with Feed Arm, 133x35x81 cm; 33kg
- Case 3: iTNS Controller case + cables + BUC, TBD; 30kg max

Ku-Band (Linear)

Transmit Power.....	1 to 200 Watt*
Transmit (Tx) Frequency.....	13.75 - 14.50 GHz
Receive (Rx) Frequency.....	10.70 - 12.75 GHz
Feed Interface.....	WR75 (Rx).....WR75 (Tx)
Transmit (Tx) Frequency.....	70% (Rx).....70% (Tx)
Receive (Rx) Frequency.....	41.8 dBi (Rx).....43.5 dBi (Tx)
Antenna Noise Temperature	
10° Elevation.....	58K
30° Elevation.....	53K
Sidelobe better than.....	100V/D < Ø < 20°..... 29 - 25 Log Ø dBi
	20° < Ø < 26.3°..... -3.5 dBi
	26.3° < Ø < 48°..... 32-35 Log Ø dBi
	48° < Ø..... -10 dBi
Cross-Polarization on Axis.....	30 dB..... 35 dB
Within 1dB Beamwidth.....	22 dB..... 26 dB
Return Loss.....	17.7 dB typ..... 20 dB typ
Insertion Loss.....	0.3 dB typ..... 0.1 dB typ
Tx/Rx Isolation.....	40 dB..... 80 dB
Feed - 2 Port XPol	

