Model 2470XY Type 1
2.35m Fly-Away Multi-Orbit Tracking Antenna

ANTENNA FEATURES

- 2470XY Type 1: portable multi-orbit tracking antenna
- Standard and high-power configurations are mPOWER-certified
- XY positioner eliminates overhead keyhole
- Segmented carbon-fiber reflector allowing for optimized pack up, toolless assembly, rapid setup, and tear down
- Automatic pedestal tilt sensors
- OpenAMIP- and OpenBMIP-compliant
- Two antennas support make-before-break on mPOWER constellation

MECHANICAL SPECIFICATIONS

Reflector Construction		9-panel, 2.35m segmented, carbon-fiber composite
Optics		Axisymmetric ring focus splash plate
Travel Range	**X**	± 90°
	y	± 90°
Axis Speed	**Azimuth**	15°/second
	Elevation	15°/second
RF Interface		40W Mission Microwave BUC amplifier
Power Requirements		115/230 VAC single-phase; 400 W, excluding BUC and modem
Case Weights/Dimensions		Seven cases – all weigh less than 190 lbs. (86 kg)

ENVIRONMENTAL SPECIFICATIONS

Wind – Survival	Anchored	60 mph (97 km/h) in stowed position (90° elevation)
Wind – Operational	Anchored	20 mph (32 km/h)
	Not Anchored	30 mph (48 km/h) gusting to 45 mph (72 km/h)
Pointing Loss in Maximum Operational Wind		1 dB typical at Ka-Band receive
Temperature	Operational	-4° F to 140° F (-20° C to 60° C)
	Survival	-40° F to 158° F (-40° C to 70° C)

RF PARAMETERS: KA-BAND (mPOWER TYPE 1)

		Receive	Transmit
Frequency Range (GHz)		17.70 – 20.20	27.50 – 30.00
Polarization Configuration		Circular Polarization (CP) orthogonal standard	
Gain (dBi)		50.8	54.9
Beamwidth (Degrees)	**-3 dB**	0.4°	0.3°
Radiation Pattern Compliance		FCC 25.209, ITU-R S.580-6	
EIRP		--	68.9 dBW with 31.6 W Plin BUC
G/T Midband (Clear Horizon, Typical)		27.0 dB/°K with 100° LNB	--
Axial Ratio (Ka and X Only, Within Pointing Cone, dB)		1	1
Feed Port Isolation (Tx to Rx)		80	80

CONTROLLER - ITC

Features	The **AvL Intelligent Terminal Controller (ITC)** is embedded on the antenna with a built-in compass, GPS and tilt compensation. ITC is Ethernet-based, modem-agnostic, OpenAMIP-compliant, and updated with the latest cybersecurity. The **ITC** is operated with a web-based user interface (**ITC Explorer**). The controller includes a satellite profile management system. The ITC has a built-in AvL carrier/beacon receiver with an optional rack-mount interface panel or outdoor-rated power supply unit (PSU). The ITC offers intelligent tracking and multi-orbit capabilities. Power requirements vary by antenna.

OPTIONS – UPGRADES AND SERVICES

- Spare Parts Kit

Specifications subject to change without notice.
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PACKAGING CONFIGURATION