

Direcstar SPFx12A Fly-Away VSAT Antenna

Staying connected, even in the most remote locations, has come to be expected in today's fast paced, high tech global market place. And the new Servicesat Airline Checkable Auto-Acquire Flyaway Antenna meets the ever growing need of having a real-time broadband solution in the most remote of locations when airline transportation is required. Servicesat Fly-Away Antennas use the strongest, most rugged actuators and motors in the industry, allowing for maximum reliability in extreme environments as well as providing the fastest acquisition times in the market. The fully-integrated two-way controller features single-button operation without requiring an external PC. The Controller is rack-mountable, and the built-in DVB receiver and GPS makes the Servicesat Two-Way Controller work on most platforms available in the industry including HughesNet™, iDirect, SpaceNet®, Comtech®, and Nera.



SPFx12A Control Unit



Fly Away SPFx12A Reflector Case



Complete Case kit with SPFx12A Antenna Deployed



GENERAL INFORMATION

Reflector Type: 4 piece segmented 1.2 M .8 F/D Glass Fiber Reinforced Polyester SMC
Optics Offset: Prime Focus Offset Feed
BUC Supported*: 6.8Kg / 30.48cm L x 19.7cm W x 14cm H
Polarization*: Cross-pol
Mount Geometry: Elevation Over Azimuth
Set-up Time: Less than 15 minutes

ELECTRICAL

Controller Dimensions: 2U 19" Rack Mountable
Power Supply Input: 100-250V 3A Max
Running Load: 47-63Hz 300W Max
Output: 48V 6.7A Max
Electrical Data Interface*: RG6 60' (18.25 m)
Transmit (Tx)*: RG6 Compression F Connector
Receive (Rx)*: RG6 Compression F Connector
Sensors: GPS
Compass +/- 15°
Tilt +/- .5°

*OPTIONS

- Larger BUCs supported using High Power BUC mounting kit and waveguide
- Co-Pol • RG11 Cables • Reflector sizes .75M, .84M, .98M, 1.2M

RF

Tx Interface: Waveguide - 3' WR75 Flange Flexible and Twistable Waveguide
Rx Interface: WR75 Flange
Frequency Range Rx: 10.95 - 12.75 Ghz
Tx: 13.75 - 14.50 Ghz
Gain (Midband) Rx: 41.5 dBi
Tx: 43 dBi
VSWR Rx & Tx: 1.3:1
Beamwidth Rx: 1.4° (-3 dB), 2.4° (-10 dB)
Tx: 1.2° (-3 dB), 2.1° (-10 dB)
Radiation Pattern Compliance: FCC § 25.209
Antenna Noise Temperature: 46K (20° EI), 43K (30° EI)
Cross Pol Isolation on Axis Rx & Tx (Minimum): 30 dB
Isolation Port to Port (Minimum) Rx: 35 dB
Tx: 80 dB

DIMENSIONS

Stowed Dimensions: N/A
Max Deployed Height: 177.8cm
Mount Rail Width: N/A
Weight: see Case Dimensions

MECHANICAL

Range Of Motion: Azimuth: 342° (+/- 171°)
Elevation: 12° to 93° Operational
Polarization: +/- 90°
Speed: Deploying Elevation: 4.6° Per Second
Stowing Elevation: 5.0° Per Second
Deploying Azimuth: 0.4° Per Second
Time to Acquisition: < 2 Minutes (Typical)
Motors: Elevation: 36V HD Linear Actuator (0.1° Resolution)
Azimuth: 24V HD Brushless Motor (0.1° Resolution)
Polarization: 24V HD Brushless Motor (0.1° Resolution)
Drive Override: Electrical Elevation, Manual for SK

ENVIRONMENTAL

Wind Operational Deployed: 48 Km/h w/ballast or anchors
Survival Deployed: 120 Km/h EL at 90°
Survival Stowed: N/A
Temperature Operational: -40°F to 127°F (-40°C to +50°C)
Survival: -58°F to 176°F (-50°C to +80°C)

CASE DIMENSIONS

Reflector Case (Size/Weight): 71.2cm L x 52cm W x 71.1cm H / 35kg
Feed Arm Case (Size/Weight): 137.2cm L x 30.5cm W x 33cm H / 23.8Kg
AZ/EL Case (Size/Weight): 88.9cm L x 40.6cm W x 53.3cm H / 33.3Kg
Tripod Case (Size/Weight): 99cm L x 30.5cm W x 29.2cm H / 18.8Kg