

Direcstar SPFx12A Fly-Away VSAT Antenna

The **Direcstar SPFx12A** VSAT antenna is the toughest, highest quality, lowest cost, auto-deploy/auto-acquire **Fly-Away** satellite antenna in the market today. The **SPFx12A** antenna is capable of pointing at any satellite with an accuracy of 0.1 degrees in less than 2 minutes. The complete system can be reduced to 4 easy to handle, purpose built, cases. **Servicesat Direcstar 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. and Nera.

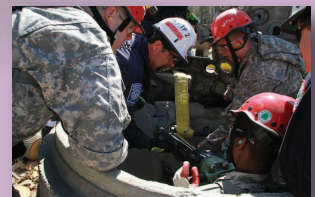


Complete Case kit with SPFx12A Antenna Deployed



SPFx12A Control Unit

Fly Away SPFx12A
Reflector Case



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