

# SVS SATELLITE SYSTEMS

## SFA200-120 DIAMOND FLY-AWAY ANTENNA

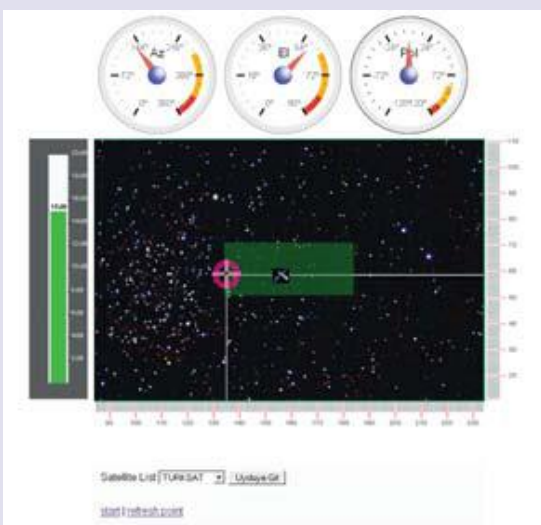
- Robust
- High Performance
- Powerfull
- 120 cm Offset Reflector
- Efficient
- Easy to mount
- Designed for Ku, Ka, DBS, C, X band uplink
- Compliant with IATA Standart



SVS SFA200-120 Diamond Carbon Fiber is a high performance, powerfull and efficient Fly Away Antenna System that is designed for uplink operations of broadcasters and data operators It is designed as a reliable system against heavy duty conditions and operations in the field during many years.

SFA200-120 Diamond Carbon Fiber Antena is an easy to set up system so that it can be set up with in 5 minutes.

SVS SFA200-120 helps operator to find satellite accurately thanks to GPS, Compas, Inclonometer and DVB Tuner Card coming with it. Instead of motors, operator can find the desired satellite by adjusting to antenna reflector by looking to the computer screen. When satellite is found, the software warns you that it is "locked". The software also provides audio visual alarms.



- Azimuth Sensor
- Polarization Sensor
- Elevation Sensor
- Proximity, Optional Resolver
- Potentiometer, Optional Resolver
- Clinometer, Optional Resolver

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## SFA200-120 DIAMOND FLY-AWAY ANTENNA

### RF SPECIFICATIONS

	Transmit	Recive
Frequency Band	13.75-14.5 GHz	10.95-12.75 GHz
Polarization	Linear Orthogonal	Linear Orthogonal
Antenna Gain	43.6 dBi	42.2 dBi
Antenna Noise Temperature	-	48°K el; 10°
Cross Polarization	<-35 dB within 0.3° boresight	<-35 dB on boresight
	<-30 dB within copolar pattern relative to co-polar peak	
Off Axis Gain	$1.8^\circ < \theta < 4.0^\circ$ @25-25 log $\theta$ dBi $4.0^\circ < \theta < 20.0^\circ$ @23-25 log $\theta$ dBi $20.0^\circ < \theta < 130.0^\circ$ @-10 dBi $130.0^\circ < \theta < 180.0^\circ$ @-10 dBi	$1.8^\circ < \theta < 35^\circ$ @29-25 log $\theta$ dBi $35.0^\circ < \theta < 130.0^\circ$ @-10 dBi $130.0^\circ < \theta < 180.0^\circ$ @+5 dBi
( $\theta=90^\circ$ )		
( $\theta=0^\circ$ )		
VSWR	1:3:1 Max	-
Feed Interface	WR-75	WR-75
Isolation	>40 dB, excluding Tx reject filter	35 dB
Filter Rejection	Transmit Reject >70 dB	

### MECHANICAL SPECIFICATIONS

Antenna Geometry	Offset Front Feed
Antenna Reflector Effective Aperture	Diagonal: 1.5 m, Across Flat : 1.2 m
Ports	2 (optionally 3)
Elevation Range	0°-90°
Azimuth Range	±180
Polarization Range	±92°
Reflector Material	Carbon Fiber, Four-piece segmented "Diamond" shaped reflector, 1.0 m across-flats. The reflector is manufactured in carbonfiber with a honeycomb centre. All external surfaces primed and finished in two-pack polyurethane white paint

### ENVIRONMENTAL SPECIFICATION

	Operational	Survival
Wind Load	60km/h	140 km/h(stowed)
Ambient Temperature	-30°C to.+ 60°C	-40°C to 70°C
Humidity	%0 - %100	%0 - %100

