

SVS SATELLITE SYSTEMS

SPF180 C-Ku BAND ANTENNA

- Designed for Ku and C band uplink
- Easy to mount
- Simultaneously 3-axis movement
- Pointing to a Satellite with One Touch of a button
- Stow the Antenna with One Touch of a button
- Motor Current Protection and Software/Hardware limits
- Antenna Open Alarm Output for Safety
- GPS Data for modems
- Can be adapted for custom implementations
- Reflector lock for Heavy Duty Conditions (shock absorber)
- DVB Tuner Card for fine tuning and recognizing Satellite
- Robust Mechanic with Cogwheel Rigidity



SVS offers a complete line of Mobile Antennas, Quick Deploy Drive-Away Antennas at the best possible price. Designed with the latest technology to meet and exceed industry standards, SVS' Antenna Systems, Software and Antenna Controllers offer world-leading performance and unmatched quality. SVS' Drive-Away Antennas are easy to operate and ready to install in most vehicles. Includes auto pointing AKS Controller and proven reliability



ANTENNA OPTIONS

- DE-ICING OPTION UP TO 2500 W
- FULL HOUSING OPTION
- 3-PORT FEED OPTION
- AKS SPECTRUM VIEWER OPTION
- W/G CROSSOVER KIT UP TO FEED ARM
- 7/24 REMOTE SUPPORT SERVICE OPTION
- ON SITE PREVENTATIVE MAINTENANCE SERVICE OPTION
- ON SITE COMMISSIONING SERVICE OPTION
- SINGLE OR REDUNDANT AMPLIFIER INTEGRATION OPTION

SPF180 C-KU BAND ANTENNA

RF SPECIFICATIONS	C-Band	Ku-Band	
Frequency Band	Tx: 5.850-6.425 GHz Rx: 3.625-4.200 GHz	Tx: 13.75-14.50 GHz Rx: 10.70-12.75 GHz	
Polarization	Circular	Linear Orthogonal	
Antenna Gain	(±0.4 dBi) Tx: 39.5 dBi @ 6.1 GHz Rx: 35.4 dBi @ 3.9 GHz	(±0.2 dBi) Tx: 46.8 dBi @ 14.3 GHz Rx: 45.3 dBi @ 12.0 GHz	
Antenna Noise Temperature	41° K @ 10° EI 36° K @ 20° EI 33° K @ 30° EI	43° K @ 10° EI 28° K @ 20° EI 23° K @ 30° EI	
3 dB Beamwidth	Tx: 2.0° @ 6.1 GHz Rx: 3.0° @ 3.9 GHz	Tx: 0.79° @ 14.3 GHz Rx: 0.99° @ 12.0 GHz	
Antenna Cross Polarization	-	30 dB (On Axis) 26 dB in 0.5 dB Contour	
Axial Ratio	Tx: 1.3 VAR (2.3 dB) Rx: 1.3 VAR (2.3 dB)	-	
Isolation (Port to Port)	Tx: 80 dB Rx: 60 dB	Tx: 80 dB Rx: 35 dB	
Co-polar Sidelobe Envelope (Tx, dBi)	29-25 log θ dBi	2.8° < θ < 20°	1° < θ < 20°
	-3.5 dBi	20° < θ < 26.3°	20° < θ < 26.3°
	32-25 log θ dBi	26.3° < θ < 48°	26.3° < θ < 48°
	-10 dBi	48° < θ < 180°	48° < θ < 180°
VSWR	Tx: 1.3:1 Rx: 1.5:1	Tx: 1.3:1 Rx: 1.5:1	
Feed Interface	Tx: CPR-137 Rx: CPR-229	WR-75	
MECHANICAL SPECIFICATIONS			
Antenna Geometry	Offset Feed Prime Focus		
Ports	2 (optionally 3 port)		
Elevation Range	10°-90°		
Azimuth Range	±180°		
Polarization Range	±100°		
Weight	218 kg		
Reflector Material	Fiber Glass-Reinforced Polyester		
SPEED	Minimum	Maximum	
Azimuth	0.2°/sec	1.6°/sec	
Elevation	0.2°/sec	1.6°/sec	
Polarization	0.65°/sec	7°/sec	
ENVIRONMENTAL SPECIFICATIONS	Operational	Survival	
Wind Load	72 km/h	120 km/h (stowed)	
Ambient Temperature	-30°C to +60°C	-50°C to +80°C	
Humidity	0% - 100%	0% - 100%	

