

SVS SATELLITE SYSTEMS SDC150 MOTORIZED SNG ANTENNA

- ↪ Eutelsat Auto Pointing Approval with resolver option.
- ↪ Diamond shape offset carbon fiber reflector
- ↪ Designed for Ku, Ka, DBS, C, X Band uplink
- ↪ Easy to mount
- ↪ Advanced antenna controller
- ↪ High performance
- ↪ 3-axis efficient antenna



SDC150 is a high performance, powerful and efficient motorised SNG antenna system.

SDC150 is designed for Ku-band uplink operations as part of a dedicated integrated uplink vehicles. It has been also designed for heavy duty conditions as a reliable system which was proved in field for many years in operation.

SDC150 is an easy to mount antenna system on the roof of the vehicle thanks to its compact design.

Once you fix the antenna you can use the system for many years without any problem.

SDC150 is also easy for removing and re-installation onto new vehicles.

ANTENNA CONTROL CAPABILITIES

Level 1: Simple version to control azimuth, elevation, polarization movement, automatic stow and deploy to preset position.

Level 2 : Automatic antenna pointing to selected satellite by using GPS and fluxgate compass.

Level 3 : Tracking of an inclined orbit satellite by using tuner card or beacon receiver.



Mechanical Limit Switches :

Provides limitation for the 3-axis movement, stow position & status control by 8-limit switches
DVB-S/S2 Tuner card, allows to make fine tuning and recognize satellite

Applicable options : 2 port receive, housing, de-icing, resolver, additional tilt sensor

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RF SPECIFICATIONS

		Transmit	Receive
Frequency Band		13.75-14.50 GHz	10.95-12.75 GHz
Polarization		Linear Orthogonal	
Antenna Gain		46 dBi (typical) 45.5 dBi(minimum)	44 dBi (typical) 43.7 dBi(minimum)
Antenna Noise Temperature		-	48°K el: 20°
Antenna Cross Polarization Isolation		35 dB	35 dB
	25-25 log θ dBi	1.0° < θ < 2.5°	-
In Azimuth plane ($\Phi=90^\circ$)	19-25 log θ dBi	2.5° < θ < 15.0°	-
	-10 dBi	15.0° < θ < 140.0°	-
Off axis gain	+5 dBi	140.0° < θ < 180.0°	-
	29-25 log θ dBi	1.0° < θ < 35.0°	1.5° < θ < 35.0°
In Elevation plane ($\Phi=0^\circ$)	-10 dBi (dB typical)	35.0° < θ < 130.0°	35.0° < θ < 130.0°
	+5 dBi	130.0° < θ < 180.0°	130.0° < θ < 180.0°
3 dB Beam Width		0.89° @ 14.3 GHz	0.99° @ 12.0 GHz
VSWR		< 1.3:1 Max	-
Feed Interface		WR-75	WR-75
Tx to Rx Isolation (with transmit reject filter)		> 80 dB	-
Insertion Loss		0.2 dB	0.3 dB
Max. Power		800W	-

MECHANICAL SPECIFICATIONS

Antenna Geometry	Off-set Front Feed	
Antenna Reflector Effective Aperture	Diagonal: 1.9m, Across flats: 1.5m	
Ports	2 (optionally 3 port)	
Elevation Range	0°-70° (without housing), 5°-70° (with housing), (Up limit can be adjustable till 90°)	
Azimuth Range	$\pm 180^\circ$, $\pm 135^\circ \pm 1^\circ$ (with resolver)	
Polarization Range	$\pm 95^\circ$	
Weight	200 Kg	
Reflector Material	Carbon Fiber	
Elevation Safety Stow Degree	12°	
SPEED (32 steps easy adjustable speed driven by user)		
	Minimum	Maximum
Elevation	0.2 °/sec	2.3 °/sec
Azimuth	0.2 °/sec	2.3 °/sec
Polarization	0.2 °/sec	4.8 °/sec
Dimensions	Max 232 x 189 x 68 cm (with Pod)	

ENVIRONMENTAL SPECIFICATIONS

	Operational	Survival
Wind Load	60 km/h	160 km/h (stowed)
Ambient Temperature	-40 ° C to +60 ° C	-50 ° C to +70 ° C
Humidity	%0 - %100	%0 - %100

