



ND SATCOM

SKYRAY Compact 1500*plus*



characterized

The SKYRAY family with more than 300 sold systems world-wide is the most robust product in the market. All moving parts are completely sealed against dust, humidity and icing. It is transmitting for customers in very cold snowy regions as well as in very hot desert areas.

The SKYRAY Compact plus 1500 antenna system can be easily mounted at standard railings of vehicles via its 6 mounting legs. It is designed for EBU transmission with a redundant RF chain for up to 2 x 400W HPAs. This antenna system is best of breed regarding lifetime, wind load and pointing accuracy. The automatic pointing process is supported by high resolution resolvers and measurement of the receive signal. The amplifiers are mounted into the feed arm in order to shorten the waveguide length and to minimize the signal loss.

PLUG AND PLAY

- Easy and cost-effective vehicle integration with standard mounting components
- Automatic pointing system incl. polarization optimization with measurement
- Easy to operate web interface and one button operation

KEY FEATURES

- For EBU transmissions 2 x 400 W TWTA
- Highest reliability – 5 years of warranty
- Aerodynamic casing for high speed travel
- RF Characteristic and automatic pointing option is Eutelsat approved
- Maintenance free AZ/EL positioner
- Highest wind load in the market
- Multiband exchangeable feed system on request

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TECHNICAL SPECIFICATIONS

ANTENNA SPECIFICATIONS

Antenna Diameter	1.5 m diamond shape
Antenna Pointing (SKYWAN, DVB carrier)	Antenna Control Unit ACU 5020 / one button operation Option: Automatic Pointing System (APS) supports GPS, compass and inclinometer. Polarisation fine tuning done by true measurement
Azimuth Travel	± 190°
Elevation Travel	10° to 70° continuous (5° to +90° on request)
Antenna Backup System	Car Battery Emergency Control for motors via ACU Optional manual hand cranks for driving Az/EI
Drive Rates	High Speed: 2°/sec; Slow Speed: 1°/sec
Reflector	Single piece diamond shaped reflector

PHYSICAL SPECIFICATIONS

Dimensions (L x W x H)	220 cm x 156 cm x 71 cm
Weight	118 kg (fully covered)

ENVIRONMENTAL SPECIFICATIONS

Temperature Range	-30° to +55°C
Survival Temperature	-40°C to +60°C
Humidity	0% to 100% with condensation
Operational Wind Speed	100 km/h
Rain	Survival in heavy rainstorm
Survival Wind Speed	stowed: 190 km/h; unstowed: 140 km/h
Solar Radiation	1000 W/m ²
Radial Ice	2.5 cm on all surfaces

RF SPECIFICATIONS

Tx Frequency Range	13.75 – 14.50 GHz
Rx Frequency Range	10.7 – 12.75 GHz
Tx Antenna Gain	44.5 dBi (typical), 43.6 dBi (min) @ 14 GHz
Rx Antenna Gain	43 dBi (typical), 42.2 dBi (min) @ 11.7 GHz
G/T	22.3 dB/K @ 30° Elevation
Antenna Noise Temperature	25K @ 30° Elevation
VSWR	Rx: <1.3:1 (Rx port 10.95 – 12.75 GHz) Tx: <1.3:1 (Tx port 13.75 – 14.5 GHz)
Waveguide Interface Flange	WG17/UBR 120
Max. Allowed EIRP	51.0 dBW/40 kHz for digital carriers transmitted at the satellite receive

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