



## ND SATCOM

### SKYRAY Compact 1500



The SKYRAY family with more than 300 systems sold 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 1500 antenna system can be easily mounted at standard railings of vehicles via its 6 mounting legs. It can be used with a non-redundant HPA up to 400 Watt for breaking news or with redundant SSPAs up to 100 W each for smaller events. 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.

The system will be delivered with an easy to operate ACU (Antenna Control Unit) incl. web interface.

#### 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

- Highest reliability – 5 years of warranty
- All moving parts are completely sealed
- Aerodynamic casing for high speed travel
- RF Characteristic and automatic pointing option is Eutelsat type approved
- Individually configurable for Tx power 20 W SSPA – 400 W TWTA
- Maintenance free AZ/EL positioner
- Highest wind load in the market
- Multiband exchangeable feed system on request

# TECHNICAL SPECIFICATIONS

## ANTENNA SPECIFICATIONS

Antenna Diameter	1.5 m
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/El
Drive Rates	High Speed: 2°/sec; Slow Speed: 1°/sec
Reflector	Single piece diamond shaped reflector

## PHYSICAL SPECIFICATIONS

Dimensions (L x W x H)	220cm x 156cm x 60 cm
Weight	118 kg (fully covered)

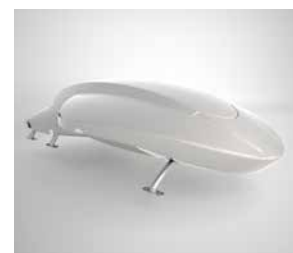
## ENVIRONMENTAL SPECIFICATIONS

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 <sup>2</sup>



## ELECTRICAL 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 contour of 0 dB/K (EESS 502 § 6.1 refers)



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