



ND SATCOM

SKYRAY MAS 1900

These mobile antenna subsystems can be mounted on any appropriate vehicle. The high performance antenna reflector teamed with the robust motorized mount create the ideal combination to serve the needs for reliable SNG transmissions. The system is fully waterproof and designed for continuous operation even under harsh environmental conditions.

With the choice of sizes from 1.3 m to 1.9 m a broad range of applications in X-, Ku- and optionally DBS-Band can be optimally covered. Additional datasheets about technical specifications are available on request.

KEY FEATURES

- RF Characteristic and Automatic Pointing Option is EUTELSAT certified
- Highest levels of reliability and robustness
- Modular and upgradeable
- Individual configurable
- Very high wind load
- Intelsat, Eutelsat und AsiaSat Type approved

TECHNICAL SPECIFICATIONS

ANTENNA SPECIFICATIONS

Antenna Diameter	1.9 m diagonal
Antenna Pointing (SKYWAN, DVB carrier)	Antenna Control Unit ACU 5020: Automatic pointing System (ApS) – one button operation, supports GPS, compass and inclinometer. ACU 4100A: Supports autopointing with ext. Windows application (M&C, APS)
Azimuth Travel	± 177° (± 190° with ACU 5020)
Elevation Travel	5° to +90° continuous
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)	66 cm
Weight	95 kg (without RF equipment)

ENVIRONMENTAL SPECIFICATIONS

Temperature Range	-30° to +55°C
Survival Temperature	-40°C to +70°C
Humidity	0% to 100% with condensation
Operational Wind Speed	100 km/h
Rain	Survival in heavy rainstorm
Survival Wind Speed (Stowed)	140 km/h
Solar Radiation	1000 W/m ²

ELECTRICAL SPECIFICATIONS

Tx Frequency Range	13.75 – 14 .50 GHz
Rx Frequency Range	10.7 – 12.75 GHz
Tx Antenna Gain	46 dBi (typical), 45.5 dBi (min) @ 14 GHz
Rx Antenna Gain	44 dBi (typical), 43.7 dBi (min) @ 11.7 GHz
Antenna Noise Temperature	110K @ 20° Elevation (linear) / 90K @ 40° Elevation (linear)
G/T	21.9 dB/K @ 30° Elevation
Antenna Noise Temperature	25K @ 30° Elevation



RF SPECIFICATIONS

VSWR	Rx: <1.3 : 1 (Rx port 10.95 – 12.75 GHz) / Tx: <1.3 : 1 (Tx port 13.75 – 14.5 GHz) Isolation: Tx band >40 dB excluding transmit reject filter, Rx band >35 dB
Waveguide Interface Flange	WG17/UBR 120
Max. allowed EIRP	48.8 dBW / 40 kHz for digital carriers transmitted at the satellite receive contour of 0 dB/K (EESS 502 § 6.1 refers)

HEADQUARTERS

ND SatCom GmbH
Graf-von-Soden-Strasse
88090 Immenstaad
Germany
PHONE: +49 7545 939 0
FAX: +49 7545 939 8780
E-Mail: info@ndsatcom.com

CHINA

ND SatCom (Beijing) Co. Ltd.
Unit 1029, Landmark Tower 2
No. 8 Dongsanhuan Bei Lu,
Chaoyang District
Beijing 100004, China
PHONE: +86 10 6590 6869/6878

MIDDLE EAST

ND SatCom FZE
BA02, South Zone 5
P.O. Box: 261757
Jebel Ali Free Zone
Dubai-United Arab Emirates
PHONE: +97148865012