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SKYRAY MAS 2000

The SKYRAY family with more than 300 systems sold world-wide is one of the most robust product in the market. All moving parts are completely sealed against dust, humidity and icing. It reliably transmits in very cold snowy regions as well as in very hot desert areas, in high winds and heavy rainstorms. SKYRAY superbly handles such extreme temperatures and conditions.

These mobile antenna subsystems are designed for cut roofs that lower the total vehicle height while maintaining operator headroom. They range from 1.2 m to 2.0 m dish size and can host from 20 W SSPAs up to three 750 W linearised HPAs for redundancy. The antenna can transmit in C-, Ku-, K- and Ka-Band.

These systems will be delivered with an easy-to-operate Antenna Control Unit (ACU), including web interface.

High load capacity of the mounts is a major advantage with the SKYRAY MAS 2000 antennas, allowing use of the space available on the sides. Up to 70 kg of equipment can be installed on the feed arm and in back.

Another notable advantage is the waveguide switching system built into the feed arm.



KEY FEATURES

- Highest reliability 5 years of warranty
- All moving parts are completely sealed
- RF characteristic and automatic pointing option meets highest standards (Eutelsat characterization pending)
- Individually configurable for Tx power 20 W SSPA – 750 W TWTA
- Maintenance-free Azimuth/Elevation positioner
- Highest wind load in the market
- Multiband exchangeable feed system on request





TECHNICAL SPECIFICATIONS SKYRAY MAS 2000

ANTENNA SPECIFICATIONS		
Antenna Diameter	2.0 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 Azimuth/Elevation	
Drive Rates	High-speed: 2°/sec; slow-speed: 1°/sec	
Reflector	Single piece diamond shaped reflector	

PHYSICAL SPECIFICATIONS	
Dimensions (L x W x H)	230 cm x 190 cm x 60 cm
Weight	115 kg (without RF equipment)

ENVIRONMENTAL SPECIFICATIONS		
Temperature Range	-30 °C to +55 °C	
Survival Temperature	-40 °C to +60 °C	
Humidity	0 % to 100 % with condensation	
Operational Wind Speed	90 km/h	
Rain	Survival in heavy rainstorm	
Survival Wind Speed	stowed: 190 km/h; unstowed: 120 km/h	
Solar Radiation	1,000 W/m ²	

ELECTRICAL SPECIFICATIONS		
Tx Frequency Range	13.75 – 14.50 GHz	
Rx Frequency Range	10.70 – 12.75 GHz	
Tx Antenna Gain	47.2 dBi @14.25 GHz	
Rx Antenna Gain	45.9 dBi @11.7 GHz	
G/T	23 dB @30° Elevation	
	Rx: <1.3:1 (Rx port 10.95 – 12.75 GHz)	
VSWR	Tx: <1.3:1 (Tx port 13.75 – 14.5 GHz)	
NONU	Isolation: Tx band >40 dB excluding transmit reject filter,	
	Rx band >35 dB	
Waveguide Interface Flange	WG17/UBR120	



HEADQUARTERS

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