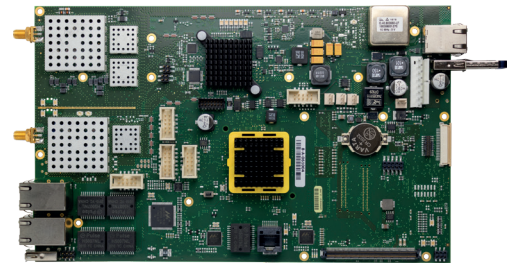




INSTALLING
RELIABILITY



SKYRAY KA4GOV



The most flexible Plug-and-Play terminal for your SKYWAN Network on any Ka-Band Satellite. Enabling Easy Operation and Security for occasional use - together with “ND SatCom M&C System for VSAT Networks” the terminal can be activated and deactivated for your Network in just one click.

This small and lightweight antenna terminal can be mounted on all passenger vehicles using commercially available roof mounts. Connecting only one power cable it can be set operational by just pressing one button. For this most exact and robust terminal EUTELSAT has stated an pointing accuracy of $\leq 0.2^\circ$ and pointing stability during high winds up to 75km/h. This results in 3 dB more transmit power than other terminals. This margin is essential for high data rates during bad weather transmissions.

The antenna comprises a high precision offset Ka-Band reflector, GPS receiver and compass enabling autopointing and auto-network acquisition. In addition to the antenna, the terminal integrates a SKYWAN modem, antenna controller and IP router which can connect smart phones or tablets to the system to control it from inside the car.

In order to minimise the vehicle modification video encoders can be integrated inside the terminal as well. The communication for the Ka4Gov terminal as well as for the video encoder can be done via the LAN interface or via Wi-Fi.

PLUG AND PLAY

- Go live quickly, from stowed to operational within 180 sec
- Automatic antenna pointing – no special knowledge required
- Easy to use Web interface through mobile device
- Integrated SKYWAN 5G Mini and IP router

KEY FEATURES

- Best pointing in the market – accuracy of $\leq 0.2^\circ$ results in 3 dB more transmit power
- Fast and stable transmissions – up to 20 Mbit/s throughput, even in bad weather
- All hardware integrated within terminal
- Type approved for EUTELSAT KA-SAT
- Aerodynamic casing for high speed travel
- Different power classes for Ka-Band BUCs available
- Easy vehicle mounting
- Built-in audio/video encoders available
- Optional with LTE switch-over capabilities

TECHNICAL SPECIFICATIONS SKYRAY KA4GOV – TERMINAL

ANTENNA SPECIFICATIONS

Antenna Diameter	0.89 m
Antenna Pointing (SKYWAN)	Automatic Pointing System (APS) based on ND SATCOM's sophisticated and field proven algorithm and sensors for one button operation
Azimuth Travel	±190°
Elevation Travel	5° to 78°
Drive Rates	Variable drive speed up to 10 °/sec
Reflector	Single piece, prime focus, offset feed



PHYSICAL SPECIFICATIONS

Dimensions (L x W x H)	138.5 x 95 x 35 cm (without cover) 159 x 101 x 40 cm
Weight	approx. 75 kg fully operational, depending on options



ENVIRONMENTAL SPECIFICATIONS

Temperature Range	-30 °C to +50 °C (optionally up to +60 °C)
Survival Temperature	-40 °C to +70 °C
Humidity	0 to 100 %
Operational Wind Speed	75 km/h
Rain	Survival in heavy rainstorm
Survival Wind Speed	130 km/h deployed, 180 km/h stowed
Solar Radiation	1,000 W/m ²



RF SPECIFICATIONS

BUC Power	5 W up to 25 W
Tx Frequency Range	27.5 – 30 GHz circular
Rx Frequency Range	17.7 – 20.2 GHz circular
Tx Antenna Gain@29.75 GHz	45.8 dBi
Rx Antenna Gain@19.95 GHz	42.4 dBi
Max allowed EIRP	29.3 dBW/40 kHz
G/T	19.9 dB/K@19.95 GHz, 20° Elevation
EUTELSAT	EESS 502 Standard M Pointing error ≤0.2°



INTERFACES

Power	26 V DC ±2 %
Ethernet	LAN/WLAN interface
Power Consumption	min. 90 W, dependent on Transceiver Version



VSAT SPECIFICATIONS

Modem	SKYWAN 5G Mini
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