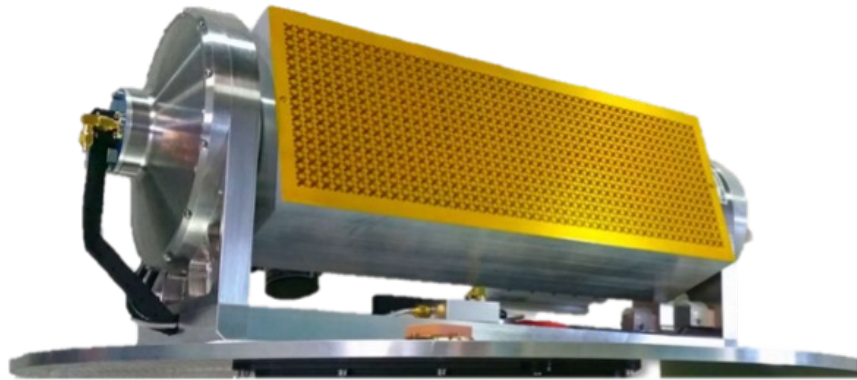


Kebni SOTM | Low profile On-The-Move terminal

Ka-band



Designed for land based vehicles

The Kebni SOTM is a vehicle mounted low profile antenna. The antenna is easy to install providing superior radio performance to support mission critical applications used in the broadcast applications, but also on most types of gov/mil vehicles.

4-port Design

The 4-port design makes all polarizations available without the need for mechanical switching between RHCP/LHCP.

The step between reflector and electronically phase steered flat panel

This antenna design utilize a waveguide array that use the classic BUC/LNB and a 2-axis (Az/EI) brushless motor design enabling elevation scan -10° to $+190^{\circ}$ and much lower profile than a reflector design. This provides an on the move solution that reduce the height of a reflector design without being limited by the scan angle loss in an active electronically phase steered flat panel design. All different types of antenna/terminal design has its benefits, so finding the right combination for your mission is important.

Fast and Robust System

The stabilized platform achieves superb pointing accuracy by utilizing a GNSS-enhanced inertial AHRS and RF/Inertial sensor fusion algorithm. The system has

Kebni SOTM

KEY FEATURES

- Low profile vehicle mount
- No elevation scan loss
- Fast acquisition
- High MTBF
- Modem agnostic

been tested on various satellites, vehicles and modems achieving full duplex data rates in excess of 10 Mbit/s in standard conditions

Frequency bands

Today the terminal covers comm/mil Ka-band (Tx 29 - 31 GHz, Rx 19.2 - 21.2 GHz), but there are plans for additional bands and combinations to meet customer specific requirements.

Compliance to Standards/Export restrictions

The terminal is intended for AECTP-400-3 ground wheeled and designed to meet relevant mil-std-810 parameters. There are no US ITAR/EAR restrictions.

Kebni SOTM	
Weight	~ 35 Kg (77 lbs)
Height	28.5 cm (11.2")
Diameter	60 cm (23.6")

Features	Specification data
Stabilisation Type	2-axis direct drive brushless motors
Antenna Type	Tuneless wideband waveguide array (4-port)
Antenna Size	39 x 14.7 cm (15.4" x 5.8")
Radome Size	Height: 28.5 cm (11.2") Diameter: 60 cm (23.6")
Weight including Radome	<35 kg (<77 lbs)
Frequency	Rx: 19.2 – 21.2 GHz Tx: 29 – 31 GHz
Antenna Gain (mid band)	Rx:32 dBi / Tx: 36 dBi
Axial Ratio	< 2.0 dB
Polarization	Dual circular remotely switchable RHCP/LHCP (4-port)
G/T	8.5 dB/K (typ @ mid-band)
BUC Power	Up to 50 W (Ka-band)
Antenna Movement, azimuth	Continuous, unlimited
Antenna Movement, Elevation	-10° to +190°
Elevation speed	≤ 100 °/sec, acceleration up to 700 °/s ²
Azimuth speed	≤ 200 °/sec, acceleration up to 700 °/s ²
Tracking Algorithm	Conical scan & AHRS / GNSS
Pointing accuracy	≤ 0.2°
GPS Antenna	Built in
Operating Temperature	-40 to +55 °C
Vibration Operating	AECTP-400-3 ground wheeled common carrier

Note: Specifications subject to change without further notice