inMotion-Ku

PRELIMINARY

TECHNICAL SPECIFICATIONS







SOTM Ku Terminal

Features

- Ku SOTM Antenna Terminal Operates while vehicle is moving
- · Automatic satellite acquisition and tracking
- Operates in emerging Ku-band services worldwide
- Provides affordable broadband connectivity via Satellite to mobile ground platforms (Land mobile)
- Low Profile Antenna < 30 cm in height with Look angles 10°-90°
- Compliant with FCC and ITU for Mobile VSAT (FCC 25.222, 25.134 VMES)
- Affordable, Rugged and Highly Reliable
- Operational wind speed up to 350 km/h
- BUC and LNB using Off-The-Shelf components

Application Versatility

The inMotion Ku SOTM Antenna provides an "always-on" broadband connectivity directly to any vehicle. Ideally suited for SNG, First Responders, Disaster Management, Trains, Public Transportation, Oil & Gas Exploration, Mining, Construction, Mobile Offices and Emergency Services.



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Mechanical

Platform Size
Platform Geometry
Azimuth Travel
Elevation Look Angle
1.3 m diameter
Elevation over Azimuth
0° to 360° Continuous
10° to 90°

Polarization Linear Orthogonal

Elevation Speed 80°/sec
Azimuth Speed 80°/sec
Acceleration Max. 200°/sec²
Acquisition Time < 60 sec (Initial)

Re-Acquisition Time < 6 sec (Depending on Modem)

Environmental

Wind loading
Operational 180 km/h (112 mph)
Survival 250 km/h (156 mph)

Temperature
Operational -30° to 60° C (-22° to 140° F)
Survival -40° to 70° C (-40° to 158° F)
Humidity 0-100% (condensing)

 IP Protection
 IP66 on Connectors, IP65 on Electronic Parts

 Vibration
 per MIL-STD-810F, Truck/Trailer/Tracked

Shock per IEC 60068-2-27

Physical

Antenna Dimensions L: 130 cm (51.2") W: 130 cm (51.2")

H: 30 cm (12") Weight < 54 kg (119 lbs)

Mounting Directly on Roof or Roof Racks

Ku (Linear)

Transmit Power Use BUC & LNB from COTS

Feed 2 Port XPol

 Receive
 Transmit

 Frequency (GHz)
 10.95 - 12.75
 13.75 - 14.50

 Cross-Polarization (within 1dB BW)
 > 25 dB
 > 25 dB

G/T > 14 dB/K at 30° Elev.

EIRP Spectral Density Pattern Compliant with FCC 25.134, 25.222,

25.226, 25.227 for VMES EIRP 43.5 dBW (with 10 dBW BUC)

Shipping Weights & Dimensions*

TBD

Electrical

Rx & Tx Cables 2 RG6 Cables - 10 m (33 ft) each Control Cables 10 m (33 ft)

Voltage / Power 24V DC



