iNmotion

PRELIMINARY

TECHNICAL SPECIFICATIONS



by C-COM Satellite Systems Inc.



SOTM Ka Terminal





Features

- Ka SOTM Antenna Terminal Operates while vehicle is moving
- Automatic satellite acquisition and tracking
- Operates in emerging Ka-band services worldwide
- · Provides affordable broadband connectivity via Satellite to mobile ground platforms (Land mobile)
- Low Profile Antenna < 33 cm in height with Look angles 100-900
- Compliant with FCC and ITU for Mobile VSAT (FCC 25.222, 25.138 VMES)
- Affordable, Rugged and Highly Reliable
- Operational wind speed of 180 km/h or better
- Compliant with ViaSat HTS and similar Ka-band networks

Application Versatility

The iNmotion Ka 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

1.3m diameter
Elevation over Azimuth
0° to 360° Continuous

Elevation Look Angle 10° to 90°

Polarization Dual Circular (Electronic Switching)

Elevation Speed 100°/sec
Azimuth Speed 100°/sec
Acceleration Max. 200°/sec²
Acquisition Time < 60 sec (Initial)

Re-Acquisition Time < 20 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: 33 cm (13") Weight < 40 kg (88 lbs)

Mounting Directly on Roof or Roof Racks

Ka (Circular)

Transmit Power 3 W ⁽¹⁾ Tranceiver Feed 2 Port XPol

 Receive
 Transmit

 Frequency (GHz)
 18.30 - 20.20
 28.10 - 30.00

5/T > 13.5 dB/K at 45° Elev.

EIRP Spectral Density Pattern Compliant with FCC 25.138, 25.222,

25.226, 25.227 for VMES

EIRP 43 dB at 1dB Compression & 45° Elev.

Shipping Weights & Dimensions*

Platform Crate: 138cm x138cm x 52cm (54.3" x 54.3" x 20.5"); 90 kg (198.4 lbs)

*The shipping weights/dims can vary for particular shipments depending on actual system configuration, quantity, packaging materials and special requirements

Electrical

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

Control Cables 10 m (33 ft)
Voltage / Power 24V DC or 120 VAC



Notes:

(1) Configurable for higher watt radios

