

TECHNICAL SPECIFICATIONS



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 10°-90°
- 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	1.3m diameter
Platform Geometry	Elevation over Azimuth
Azimuth Travel	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°/sec ²
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

Electrical

Rx & Tx Cables	2 RG6 Cables - 10 m (33 ft) each
Control Cables	10 m (33 ft)
Voltage / Power	24V DC or 120 VAC

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
G/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



Notes:

⁽¹⁾ Configurable for higher watt radios