



## Internet On The Move (IOTM) Ka band system



- Linear or circular polarization available
- Compatible with RADITEK DREAM modems, BUCs and LNBs
- Cold start acquisition <3min,
- <100ms re-acquisition after signal loss/block
- Rescan <20s
- High Power, low profile BUC (eg 20W) available
- Compatible with all Ka band satellites
- Ka band version is available
- DC power: 12-32V or 48V
- Precision reflector/ Cassegrain antenna
- High reliability, Horizontal ROTARY joint, slip rings, & bearings
- Precise Mechanical tracking system
- Pedestal is only 1 inch high
- 1:4 aspect ratio antenna
- Designed for most extreme conditions
- Complete INS on board
- G/T is typically 13.1 dBi/°K
- Azimuth tracks over 360°
- Elevation: 20-70°
- EIRP uplink typically 48 dBw

### Applications include:

- SNG (Satellite News Gathering), Voice-Video-Data
- First responders: in-pursuit, in-route, and on-scene
- ANY mobile Internet "On The Move", single to triple play applications.
- To 8Mbps (2 Way) STAR or MESH connectivity
- Disaster recovery, ICE, FEMA, DHS mobile field ops etc



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The Raditek RIOTM-Ka-20W-e14 is the leading edge, best and unique solution (triple play: voice, video, data) "Internet on the move": solution. Continuous access at highway speeds. The sleek, super low profile, RFT System easily mounts on the roof of **any vehicle, boat or plane**. There is minimum set up, just connect to our (L band) modem unit, which uses the world's most efficient, 2-way satellite system and 12 Volts, and it is ready to use. Data setup/interface is via RJ45 internet.

The unit is capable of up to 8Mbps, 2 way communications, with almost 100% satellite efficiency, when using Raditek's advanced satellite DREAM modem using SCPC/DAMA with uplink power control and Automatic Bandwidth On Demand (ABOD). The remote vehicle's system has its own IP address, same as if it was connected to a permanent land line. Please see Raditek's DREAM Satellite network brochure for more information.

**Order Example:** RIOTM-**Ka**-20W-002  
*Raditek internet on the move, Ka Band,, 20W BUC*

Initial acquisition time	<3m
Re-acquisition after block	<100ms
Rescan	<20s
Uplink data rate	To 5.5Mbps
Uplink data rate	To 8Mbps
Operation temperature	-30 to 55 °C
Storage temperature	-30 to 70 °C
Operating Voltage/power	12-32V, 48V option 600W total with 20W BUC/SSPA
<b>SIZE</b>	98cm dia. 24cm high
<b>Weight</b>	37Kg
<b>IF cable</b>	75 Ω N type connectors (Tx, Rx)
<b>Tx Control</b>	<50ms Tx shutdown after Rx loss

General Specifications	
Polarization	Circular
Transmit band	27.75-31.05 GHz in 3 bands
Receive band	19.2-21.75 GHz in 3 bands
EIRP	48 dBw
G/T	13.1 dB/°K
Tx Crosspole isolation	21 dB min, 28dB typ.
IF frequency	950-2150MHz
BUC power	20W
3dB Beamwidth	0.9°-1.2° Az: 2.3°-2.8° EL.
Pedestal dynamics	
Azimuth	360° adjustable
Elevation	20°-70°
Angular velocity	Az 60°/ s <sup>2</sup> ; El 110°/s <sup>2</sup>
Angular acceleration	Az 45°/ s <sup>2</sup> ; El 45°/s <sup>2</sup>
Tracking accuracy	0.25°

