

RADITEK

SATCOM

1.8m Ku Band VMA

CARBON FIBER

Vehicle Mount Antenna, Ku-Band, Tx/Rx 1.2, 1.5 or 1.8 Meters, Auto Locate



Features

- Light weight, Carbon Fiber reflector
- Auto-pointing with one button >3min acquisition time
- Compact and low stow height
- 360° azimuth adjustment
- Rugged design
- Eutelsat and Intelsat compliant
- Electronic compass & inclinometer
- Includes GPS and other sensors.



A vehicle roof mount, Ku band antenna system. A compact design, with easy, one button satellite acquisition. Its auto-pointing smart control works with high performance electronic compass, inclinometer, GPS and other sensors, ensures the acquisition of any Ku band satellite within three minutes, from a stationary vehicle.

Order Examples: RVMA-Ku-TxRx-CF-1.5M-k20

Description: (Vehicle Mount Antenna, Ku Band, Tx Rx-1.5Meter)

Additional options: 1.2 Meter version also available

Included: Tiltmeter, GPS, Compass, Beacon Receiver and DVB S1/S2 Tuner

Not included LNB and BUC

Specifications	1.2 Meter	1.5 Meter	1.8 Meter
Mechanical Performance			
Reflector	1.2m, SMC*	1.5m, Carbon fiber	1.8m, SMC*
Antenna type	Single offset antenna	Single offset antenna	Single offset antenna
Positioning sensor	BD&GPS	BD&GPS	BD&GPS
Azimuth sensor	compass $\pm 2^\circ$	compass $\pm 2^\circ$	compass $\pm 2^\circ$
Tilt sensor	tiltmeter $\pm 0.2^\circ$	tiltmeter $\pm 0.2^\circ$	tiltmeter $\pm 0.2^\circ$
Azimuth Range	$\pm 240^\circ$	$\pm 200^\circ$	$\pm 240^\circ$
Elevation Range	$0^\circ - 95^\circ$	$0^\circ - 90^\circ$	$0^\circ - 90^\circ$
Polarization Range	$\pm 95^\circ$	$\pm 95^\circ$	$\pm 95^\circ$
Elevation Travel Rate	0.1-9°/sec	0.1-9°/sec	0.1-9°/sec
Azimuth Travel Rate	0.1-9°/sec	0.1-9°/sec	0.1-9°/sec
Polarization Travel Rate	0.1-12°/sec	0.1-12°/sec	0.1-12°/sec
Physical performance			
Stowing size	L:175cm W:124cm H:30cm	L:200cm W:150cm H:41cm	L:240cm W:188cm H:50cm
Weight	60kg	$\leq 110\text{kg}$	$\leq 130\text{kg}$

* SMC Sheet Molding compound

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Electronic Performance			
Frequency	Ku band, linear polarization	Ku band, linear polarization	Ku band, linear polarization
power capability	500W	1000W	1000W
Tx	13.75-14.5GHz	13.75-14.5GHz	13.75-14.5GHz
Rx	10.70-12.75GHz	10.70-12.75GHz	10.70-12.75GHz
feed	2 ports, cross polarization	2 ports, cross polarization	2 ports, cross polarization
feed interface	WR75	WR75	WR75
3dB beam width	TX: 1.2°@14.3GHz	TX: 1.0°@14.0GHz	TX: 0.8°@14.0GHz
	RX: 1.5°@12.0GHz	RX: 1.1°@12.0GHz	RX: 1.0°@12.0GHz
Gain(main lobe)	RX: 41.8dBi	RX: 44.0dBi	RX: 45.3dBi
	TX: 43.3dBi	TX: 45.3dBi	TX: 46.8dBi
Noise Temperature	45°K@10° elevation	52°K@20° elevation	43K@10° elevation
	24°K@10° elevation		28K@20° elevation
			23K@30° elevation
Sidelobe Envelope	1.5°<θ<20°, 29-25logθ dBi	Satisfy ITU580 INTELSAT	Satisfy ITU580 INTELSAT
	20°<θ<26.3°, 3.5 dBi		
	26.3°<θ<48°, 32-25logθ dBi		
	48°<θ<180°, -10 dBi		
Cross Polarization(within 1 dB)	RX: ≤-30dB	RX: ≤-30dB	RX: ≤-30dB
	TX: ≤-30dB	TX: ≤-30dB	TX: ≤-30dB
Tx/Rx isolation	RX: >40dB	RX: >35dB	RX: >35dB
	TX: >90dB	TX: >80dB	TX: >80dB
VSWR	RX:1.3:1	RX:1.3:1	RX:1.5:1
	TX:1.3:1	TX:1.2:1	TX:1.3:1
Antenna Controller Unit			
Power	90-260VAC, 40-60Hz	90-260VAC, 40-60Hz	90-260VAC, 40-60Hz
Signal tracking	DVB S1/S2, beacon receiver, hot standby	DVB S1/S2, beacon receiver, hot standby	DVB S1/S2, beacon receiver, hot standby
Operating mode	Auto/Manual, key touch position	Auto/Manual, key touch position	Auto/Manual, key touch position
Dimension / Weight	1U, 2.5kg	1U, 2.5kg	1U, 2.5kg
Language	English	English	English
Setup time	≤2min	≤2min	≤2min
Pointing accuracy	0.2°	0.1°	0.1°
Power	≤240W	≤300W	≤300W
Remote network control	Support wifi control	Support wifi control	Support wifi control
Environmental Performance			
Wind Loading	Operational: 75km/h	Operational: 72km/h	Operational: 72km/h
	Survival(deploying): 100km/h	Survival(deploying): 110km/h	Survival(deploying): 110km/h
	Survival(stowing): 150km/h	Survival(stowing): 225km/h	Survival(stowing): 225km/h
Temperature	Operating temperature:-40-55°C	Operating temperature:-40-55°C	Operating temperature:-40-55°C
	Storage temperature:-55-85°C	Storage temperature:-55-85°C	Storage temperature:-55-85°C
protection grade	IP65	IP65	IP65
Humidity	0-100%	0-100%	0-100%
Altitude	≤5000m	≤5000m	≤5000m
MTBF	≥2000hr	≥2000hr	≥2000hr
MTTR	≤1.5hr	≤1.5hr	≤1.5hr