

AVL TECHNOLOGIES

MODEL 960K-09 MOBILE VSAT 0.96 M MOTORIZED VEHICULAR MOUNT



Reflector	0.96 Meter Molded Plastic
Optics	Offset, Prime Focus
Drive System	Patented Roto-Lok® Positioner
Mount Geometry	Elevation over Azimuth
Polarization	Rotation of Feed

Mechanical

Az/EI Drive	Patented Roto-Lok® Cable Drive System
Polarization Drive System	Motorized Worm Gear Drive
Reflector Material	Compression Molded Plastic
Travel	
Azimuth	400° (± 200°)
Elevation	True elevation readout from calibrated inclinometer
Mechanical	0° to 90° of reflector boresight
Polarization	± 95°
Speed	
Slewing/Deploying	2°/second typical
Peaking	0.2°/second
Motors	24V DC variable speed, constant torque
RF Interface	
BUC Mounting	Feed boom (maximum weight 16 lb.)
Waveguide	Flex waveguide from feed with O-ring groove
Coax	Two Type F connectors on panel at antenna base
Electrical Interface	One 32 ft. cable with connector from base connector panel to controller
Manual Drive	Handcrank for az and el axes, hand knob on pol
Weight	111 lbs. as shown, varies depending on options
Stowed Dimensions	59 L x 41 W x 14.5 H inches
Time to Acquisition	Less than 15 minutes, 8 minutes typical

Environmental

Wind	
Survival	
Deployed / Stowed	65 mph / 80 mph
Operational	45 mph
Pointing Loss in Wind	
20 mph	0.5 dB typical
30 mph gusting to 45 mph	1.0 dB typical
Temperature	
Operational	-25° to 125° F
Survival	-40° to 140° F

130 Roberts Street • Asheville, NC • 828.250.9950 • FAX 828.250.9938 • www.avltech.com

Electrical

	<u>Receive</u>	<u>Transmit</u>
Frequency Range	10.95 – 12.75 GHz	13.75-14.50 GHz
Gain (Midband)	39.7 dBi	41.2 dBi
VSWR	1.30:1	1.30:1
Beamwidth (Degrees)		
-3 dB	1.8	1.5
-10 dB	3.2	2.8
Radiation Pattern Compliance	FCC § 25.209, ITU-R S.580-6	
Antenna Noise Temperature	55° K at 20° elevation	
Polarization	Linear orthogonal standard, option co-pol	
Allowable Power	-14 dBw/4 kHz per FCC, -0 dBw/4 kHz per ITU	
Cross Pol Isolation		
On Axis (minimum)	30 dB	35 dB
Off Axis (within 1 dB BW)	28 dB	30 dB
Feed Port Isolation	35 dB	80 dB

Controller

Standard Controller	One button auto-acquisition of selected satellites, including peaking and optimization of cross pol. Internal movement detector and automatic stow. Includes a hand-held control and separate power supply. Certified for auto-commissioning on most satellite services.
Size	10 x 9 x 2.5 inch power supply
Input Power	100 – 240 VAC 50/60 Hz 4 A peak, 190 W Antenna running with max load

Options

BUC/HPA mounting*

*Minimum Elevation may be restricted by these options

Thule roof bar mounting kit

Flexible waveguide

Controller

World wide Software Upgrade

1RU power supply

Additional cable lengths