AVL TECHNOLOGIES

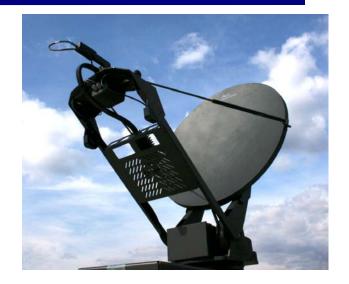
MODEL 960K-09 MOBILE VSAT 0.96 M MOTORIZED VEHICULAR MOUNT

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/El Drive Patented Roto-Lok® Cable Drive System

Polarization Drive System Motorized Worm Gear Drive Reflector Material Compression Molded Plastic

Travel

Azimuth $400^{\circ} (\pm 200^{\circ})$

Elevation True elevation readout from calibrated inclinometer

Mechanical 0° to 90° of reflector boresight

Polarization $\pm 95^{\circ}$

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

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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 2.8 3.2

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.

10 x 9 x 2.5 inch power supply Size

100 - 240 VAC 50/60 Hz 4 A peak, 190 W Antenna running with max load **Input Power**

Options

BUC/HPA mounting* Controller

*Minimum Elevation may be restricted by these options World wide Software Upgrade

Thule roof bar mounting kit 1RU power supply Flexible waveguide Additional cable lengths