
AVL TECHNOLOGIES

MODEL 1888C MOBILE VSAT ANTENNA SYSTEM



Mechanical

Reflector Type	1.8M Prime Focus Offset
Reflector Construction	Single Skin Aluminum
Mount Geometry	Elevation over Azimuth
Polarization	Rotation of Feed
Travel	
Azimuth	270°
Elevation	
Operational	0-90° boresight
Total	0-160°
Polarization	±95°
Speed	
Slewing/Deploying	2°/second
Peaking	0.2°/second
Drive System	Roto-Lok ®
Motors	24V DC Variable Speed
RF Interface	
Transmit	Type N Female Coax to W/G Adapter on Feed
Receive	WR229 Flat Flange at feed omt
Electrical Interface	25 ft. Cable with Connectors for Controller
Manual	7/16 Hex Socket Wrench on Az and El Axis
Finish	
Reflector/Feed	White Powder Coat
Positioner	Gold Anodize
Weight	325 lbs.

Environmental

Wind		
Survival: Deployed		80 mph
Stowed		125 mph
Operational: Slewing		45 mph gusting to 60 mph at 60° F
Boresight Backlash Tx Gain Loss		Tx Gain Loss 0.1 dB max, .05dB typical
Boresight Deflection Tx Gain Loss		.5 dB typical in 30 gusting to 45 mph winds
Temperature		
Operational		-20°F to 125°F
Survival		-40°F to 140°F

Electrical RF**Receive****Transmit**

Frequency

Standard

3.625-4.200 GHz

5.850-6.425 GHz

InSat

4.500-4.800 GHz

6.750-7.025 GHz

Gain (3.7 Ghz)

35.5 dBi

39.2 dBi

VSWR

1.30:1

Beamwidth (degrees)

-3 dB

3.0

2.0

-15 dB

5.1

3.3

First Sidelobe Level

-16 dB

-16 dB

Radiation Pattern

32-25 Log θ 3.2° to 7°29-25 Log θ 2.2° to 7°

Antenna Noise Temperature

10° Elevation Angle

45°K

Polarization

Linear

Linear

Power Handling Capability

40 watts

Cross-Pol Isolation

On-Axis

30 dB

30 dB

Feed Port Isolation

TX/RX

40 dB

70 dB

Controller

AvL 2050A

Jog Controller

AvL 2055A

Smart Jog Controller

RC 3000A

Full-function controller with opt. GPS and Flux-Gate

Size

Two rack units high

Input Power

110V AC, 1 ph, 60 Hz, 15 amp