

Model 1080FA 85cm Mobile VSAT FlyAway Dual-Band Motorized Transportable Antenna

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| Unique Features | <ul style="list-style-type: none"> • 85cm single Piece AvL Engineered Composite Reflector • Optional 3-Piece Reflector • Compact Elevation-over-Azimuth Cable Drive Positioner • 2 Case Configuration • 10-Minute Setup; "One-Button" Auto-Acquisition |
| Standard Rx/Tx Feed | <ul style="list-style-type: none"> • 2-Port Ka-Band |
| Optional Rx/Tx Feeds | <ul style="list-style-type: none"> • 2-Port Ku-Band Precision |
| Optional Integration Support Configurations | <ul style="list-style-type: none"> • Custom BUC Integration • Universal BUC Tray • FlyAway – Case-Based • Fly&Drive with field-installable roof-mount kit |
| Market Solutions | <ul style="list-style-type: none"> • Mobile Broadband Internet Access • Satellite News Gathering • Disaster Relief • Oil & Gas Backhaul • Defense & Homeland Security |
| Polarization Adjustment | Compact/Rugged Gear Drive |
| Standard Colorization | AvL Metallic Grey (optional colors available) |



Photo Display: 85cm 3-piece Reflector

Mechanical

Az/EI Drive	Motorized AvL Zero Backlash Cable Drive (Patent Pending)
Polarization	RHCP/LHCP Pol Select Option Available
Reflector Construction	Single Piece Carbon Fiber
Axis Travel	Azimuth: 400° (±200°) Elevation: 0-90° antenna bore sight (true elevation from calibrated inclinometer)
Az/EI Speed	Slewing/Deploying: Typical: Elevation 1°/second, Azimuth 2°/second
Motors	24 VDC Variable Speed, Constant Torque
Interface	Type F connector(s) at antenna base or 25 ft. (7.6m) Coax from Base
Electrical Interface	One 25 ft. (7.6m) cable with connector from base connector panel to controller
Manual/Emergency Drive	Hand crank for az and el axes
Time to Acquisition	Less than 15 minutes; 8 minutes typical
Size/Weight – Std. Positioner Case	26.0 L x 22.6 W x 21.5 H inches (66 L x 57 W x 55 H cm), weighs approx. 95 lbs. (43 kg)
Size/Weight – Std. Reflector Case	40.8 L x 37.3 W x 13.0 H inches (104 L x 95 W x 33 H cm), weighs approx. 140 lbs. (64 kg)
Opt. 3 Piece Reflector Case	40.5 L x 29.8 W x 14.5 H inches (103 L x 76 W x 37 H cm), weighs approx. 140 lbs. (64 kg)

Environmental

Wind – Survival	Anchored: deployed: 75 mph (121 kph), stowed (Fly&Drive option only): 100 mph (161 kph)
Wind – Operational	Anchored: 45 mph (72 kph)
Pointing Loss in Wind - Ka (Rx) 30 mph gusting to 45 mph (48 kph gusting to 72 kph)	1.0 dB typical
Temperature:	Operational: -25° to 125° F (-32° to 52° C) Survival: -40° to 140° F (-40° to 60° C)

AvL TECHNOLOGIES

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RF/Electrical

Feed Type ▶	Std. 2-Port Ka-Band		Opt. 2-Port Precision Ku-Band	
	Receive	Transmit	Receive	Transmit
Frequency Range (GHz)	19.7 - 20.20	29.5 - 30.0	10.95–12.75	13.75-14.50
Polarization Configuration	RHCP or LHCP		Linear – orthogonal (H/V)	
Gain (mid-band) @ Horn Interface (dBi)	42.9	46.2	38.5 dBi	40.0 dBi
Beam width (degrees) -3 dB	1.2	0.8	1.9°	1.6°
-10 dB	2.1	1.5	3.5°	2.9°
Radiation Pattern Compliance	ITU-R S.580.6		FCC 25.209 and ITU-RS-580-6 Eutelsat	
Antenna Noise Temperature (midband 20°el)	108° K		56°K	
G/T (mid-band, clear horizon) assuming 100 K LNB (dB/K)	19.7 dBi/°K			
Power Handling Capability		50W		
VSWR @ Horn Interface	1.30:1	1.30:1	1.30:1	1.30:1
Feed Type	Integral Feed/ Polarizer/OMT/Transceiver		Integral Feed/ Polarizer/OMT/Transceiver	
Axial Ratio	Feed Dependent		Feed Dependent	
Cross-Polarization Isolation	Feed Dependent		Feed Dependent	

Controller

Controller ▶	AvL AAQ
Features	AvL one button auto-acquisition of selected satellites, including peaking and optimization of cross pol. Internal movement detector and automatic stow. Optional hand-held control and separate power supply. Certified for auto-commissioning on most satellite services.
Size	Embedded ACU with separate 1 Rack Unit Controller Interface Panel (CIP) power supply with LCD and keypad. 250 W and 500 W (1.6m and larger antennas) versions available.
CIP Input Power	120/240 VAC 60/50 Hz, 6/3 A Max. Power consumption is antenna size dependent: During acquisition 150 W or 300 W is typical, ~ 50 W Idle.

Optional Configurations, Upgrades & Services

- Optional 3-piece segmented reflector
- Upgrade to BUC/HPA Mounting (minimum elevation may be restricted)
- Upgrade to Custom RF/IF I/O cabling configurations available
- Custom Colorization (contact factory for available colors)
- Add Custom Logo on Reflector Face (1- or 2-Color; per AvL Logo Policy)
- Spare Parts Kit
- Factory training
- Field-installable roof-mount kit
- Hard Mount pack-up (no foam)
- Optional 3 case pack-up
- Roto-mold case upgrade
- Weight reduction option

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