

AvL TECHNOLOGIES

Model 1258KFD Mobile VSAT 1.2m Motorized Fly&Drive Transportable Antenna

- | | |
|----------------------------|--|
| Unique Features | <ul style="list-style-type: none"> • 1.2m AvL Engineered Composite 3-Piece Reflector • Motorized AvL Az/EI Compact Cable Drive Positioner • Offset, Prime Focus Optics • 2-Port Ku "Precision" (standard Cross-Pol comp.) • AvL Auto-Acquisition Controller w/ Web Browser GUI • Dual-Mode Configuration: 1-Case Pack-Up with Removable Outriggers for Ground/FlyAway Mode |
| Standard Interfaces | <ul style="list-style-type: none"> • 75-ohm Embedded IF Cabling • 25-ft. (50-ohm) Remote IF Cable Kit • I/O Panel for Remote IF & Cabling |
| Options | <ul style="list-style-type: none"> • Universal BUC Mounting Kit • 50-ohm Embedded (& Remote) IF Cabling/Connectors • Enhanced Cross-Pol 2-Port Ku (Mode-Matched) Feed • Custom Reflector Logo • 100' control/IF cables on reel |



Mechanical

Az/EI Drive	Motorized AvL Zero Backlash Cable Drive (Patent Pending)
Polarization Drive System	Motorized Worm Gear Drive
Reflector Construction	1.2m 3-Piece AvL Engineered Composite
Axis Travel	
Azimuth	400° (± 200°)
Elevation	5°-90° (reflector bore sight from calibrated inclinometer)
Polarization	± 95°
Az/EI Speed	
Slewing/Deploying (typical)	2°/second az (typical); 1°/second el (typical)
Peaking	0.2°/second (typical)
Motors	24V DC variable speed, constant torque
RF Interface	
Feed Tx Input	WR75 Waveguide @ Feed TX Input (Cover Flange)
Coax	Rx and Tx: Type F (75-ohm) connectors on panel at antenna base
BUC Mounting (Optional)	Feed boom (maximum weight 15 lb.)
Controller Interface	One 25-ft. cable with connector from base connector panel to controller
Manual/Emergency Drive	Common handcrank for az, el, and pol axes
Case Transport Weight (w/ Lid)	Approximately 240 lbs. (excludes CFE equipment: BUC, modem, LNB, etc.)
Case Transport Dimensions	75.4" L x 33.4" W x 28.0" H (191.5cm L x 85cm W x 71.1cm H)
Time to Acquisition	Less than 10 minutes, 5 minutes typical

Environmental

Wind – Survival	Deployed/Anchored: 65 mph (105 kph) Stowed/Anchored: 80 mph (128 kph)
Wind - Operational	Without Anchoring: Gusts to 30 mph (48 kph) With Anchoring: 30 gusting to 45 mph (48g72 kph)
Pointing Loss in Wind (Ku RX):	
20 mph (32 kph)	1.0 dB (typical)
30 mph gusting to 45 mph (48 kph gusting to 72 kph)	2.0 dB (typical)
Temperature:	
Operational	-22°F to 125°F (-30° to 52°C)
Survival	-40°F to 140°F (-40° to 60°C)

AvL TECHNOLOGIES

Model 1258KFD Mobile VSAT Fly&Drive Antenna

RF/Electrical

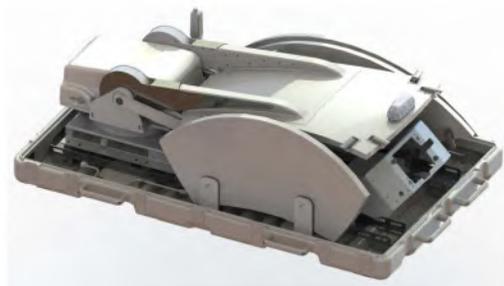
Feed Type ▶	Std. 2-Port Precision Ku	
RF Parameter ▼	Receive	Transmit
Frequency Range (GHz)	10.95 – 12.75 GHz	13.75-14.50 GHz
Gain (mid-band)	42.0 dBi	43.2 dBi
VSWR	1.30:1	1.30:1
Beam width		
-3 dB	1.4°	1.2°
-10 dB	2.5°	2.1°
Radiation Pattern Compliance	FCC § 25.209, ITU-R S.580-6	
Antenna Noise Temp.	54K at 20° elevation, 11.85 GHz	n/a
G/T (50° LNB, midband, clear horizon)	21.5 dB/° K	n/a
Polarization Type	Linear orthogonal	
Allowable Power		
FCC	n/a	-14 dBw / 4 kHz
ITU	n/a	-0 dBw / 4 kHz
Cross-Polarization 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

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
CIP Input Power	120/240 VAC 60/50 Hz, 6/3 A Max. Power consumption is antenna size dependent: During acquisition 150 W, ~ 50 W Idle

Available Options, Upgrades & Services

- Universal BUC Mounting Kit
- 50-ohm Embedded (& 25-ft. Remote) IF Cabling/Connectors
- Increased (50-ft) Remote IF Cable Length (std. 50- or opt. 75-ohm)
- Enhanced Cross-Pol 2-Port Ku (Mode-Matched) Feed
- Custom Reflector Logo
- Custom RF/IF I/O cabling configurations available
- Recommended Spare Parts Kit
- Extended Warranty



Request A Quote