AVL TECHNOLOGIES

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

Unique Features

- 1.2m AvL Engineered Composite 3-Piece Reflector
- Motorized AvL Az/El 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 75-ohm Embedded IF Cabling
 - 25-ft. (50-ohm) Remote IF Cable Kit
 - I/O Panel for Remote IF & Cabling

- Options 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 Mechanical				
Az/El 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/El 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: Stowed/Anchored:	65 mph (105 kph) 80 mph (128 kph)		
Wind - Operational	Without Anchoring: With Anchoring:	Gusts to 30 mph (48 kph) 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		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 AA	Q			
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					



