## **AVL TECHNOLOGIES**

#### Model 1.2m 1098FA Mobile VSAT FlyAway Ku-Band **Motorized Transportable Antenna**

- Unique Features 1.2m 2-Piece AvL Engineered Composite Reflector
  - Optional 1.2m 4-Piece Reflector
  - Compact Elevation-over-Azimuth Cable Drive Positioner
  - Case-Based System; 2 Case Configuration
  - 10-Minute Setup; "One-Button" Auto-Acquisition
- Standard Rx/Tx Feed 2-Port Ku-Band Precision **Optional Integration Support**

Operational

Survival

- Custom BUC Integration
- Universal BUC Tray
- Polarization Adjustment Compact/Rugged Gear Drive
  - Standard Colorization AvL Metallic Grey (optional colors available)



Mechanical					
Az/El Drive	Motorized AvL Zero Backlash Cable Drive System (Patent Pending)				
Polarization Drive System	Motorized Worm Gear				
Reflector Construction	1.2m 2-Piece AvL Engineered Composite				
Axis Travel					
Azimuth	400° (±200°)				
Elevation (reflector bore sight)	0°-90° antenna bore sight (true elevation readout from calibrated inclinometer)				
Polarization	± 95°				
Az/EI Speed					
Slewing/Deploying (typical)	2°/second azimuth; 2°/second elevation; 2°/second polarization				
Peaking	0.2°/second				
Motors	24V DC variable speed, constant torque				
Standard Integration Interfaces					
Tx Input @ Feed	Ku: WR 75 Cover Flange at Feed Tx Port; Type F coax from BUC to base				
Rx Input (AvL-supplied coax)	Type F coax from LNB to base				
BUC (& other CFE) Mounting	Feed boom (maximum weight 16 lbs. (7.3 kg))				
Controller Interface	One 30-ft. (9.1m) cable with connector from base connector panel to controller				
Manual/Emergency Drive	Common hand crank for azimuth, elevation and polarization axes				
Size/Weight – Std. Positioner Case	21.5" H x 22.6" W x 26.0" L (55cm H x 58cm W x 66cm L), weighs approx. 95 lbs. (43 kg)				
Size/Weight					
Std. 2 Piece Reflector Case	14.2" H x 33.0" W x 52.8" L (36cm H x 84cm W x 134cm L), weighs approx. 160 lbs. (73 kg)				
Opt. 4 Piece Reflector Case	16.3" H x 37.5" W x 46.5" L (41cm H x 95cm W x 118cm L), weighs approx. 160 lbs. (73 kg)				
Environmental					
Wind – Survival	Anchored: deployed: 50 mph (80 kph), stowed (Fly&Drive option only): 100 mph (161 kph)				
Wind - Operational	Anchored: 40 mph (64 kph)				
Pointing Loss in Wind (Ku RX):					
20 mph (32 kph)	0.7 dB typical				
25 gusting 40 mph (40/64kph)	1.5 dB typical				
Temperature:					

-22°F to 125°F (-30°C to 52°C)

-40°F to 140°F (-40°C to 60°C)

#### Mechanical

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eed Type ►	<b>Receive</b> 10.95–12.75	. 2-Port Prec	cision Ku Transmit	
	10.95–12.75		Transmit	
			Transmit	
			13.75-14.50	
	Li	near – orthogor	nal (H/V)	
	41.6 dBi		43.1 dBi	
	1.5°		1.2°	
	2.7°		2.2°	
	FCC	25.209 and ITL Eutelsat		
Antenna Noise Temp. (mid-band, 20° el)				
			FCC: -14 dBw/4 kHz ITU: -0 dBw/4 kHz	
	1.30:1		1.30:1	
ng cone)				
			35 dB	
			28 dB	
			80 dB	
	Controller			
AvL AAQ				
AvL one button auto-acquisition of selected satellites, including peaking and optimization of cross pol. Internal movemen detector and automatic stow. Optional hand-held control and separate power supply. Certified for auto-commissioning o satellite services.				
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.				
120/240 VAC 60/50 Hz, 6/3 A Max. Power consumption is antenna size dependent: During acquisition 150 W or 30 is typical, ~ 50 W Idle			endent: During acquisition 150 W or 300 W	
Availabl	e Options, Upgrades	& Serv	ices	
Standard: 1.2m 2-piece segmentation		Upgrade: 1.2m 4-piece segmented		
Stan	Standard: 2-Port Precision Ku-band			
			Upgrade: BUC/HPA Mounting (minimum elevation may be restricted)	
			Upgrade: Custom RF/IF I/O	
Standard: TracStar Auto. Acquire		cabling configurations Upgrade: AvL AAQ		
		Upgrade: AVL AAQ Upgrade: custom colorization and/or		
Standa			custom logo on reflector	
			Power Supply for AAQ Controller	
			Spare Parts Kit	
			Factory Training	
			Fly and Drive Upgrade Kit Jpgrade: Hard Mount 2 Case Pack-Up	
	ng cone) AvL AAQ AvL one button an detector and auto iatellite services. Embedded ACU 250 W and 500 V 120/240 VAC 60/ s typical, ~ 50 W Availabl Stanc Stanc Stand	Ing cone) Ing cone) Ing cone) Ing cone) Ing cone) Ing cone) Ing cone) Ing cone) Ing cone) Ing cone Ing cone) Ing cone Ing cone) Ing cone Ing cone Ing cone) Ing cone Ing cone	in a cone)	