

AvL TECHNOLOGIES

Model 2060 / 1220 PIB F/A

Auto Acquire Tri-Band Motorized FlyAway Antenna

Reflector Type	2.0M 9 Segment AvL Carbon Fiber
Optics	Offset, Prime Focus, 0.8 F/D
Interchangeable Feeds	C LP or CP, X CP, Ku LP
Positioner	Case-based Pack-in-the-Box
Az/EI Drive System	Patented Roto-Lok® Positioner
Mount Geometry	Elevation over Azimuth
Polarization Adjustment	Motorized Rotation of Linear Feeds



Mechanical

Travel	- Azimuth	±200°
	- Elevation (Operational)	5°-90° with ±200° Az Travel
		0°-90° with ±15° Az Travel
	- Polarization (LP Feeds)	±95° Adjustable within <1°

Speed	- Slewing/Deploying	2°/second Az; 1°/second EI
	- Peaking	0.2°/second
	- Tracking	0.1°/second

Emergency Drive Hand Crank on Az, EI; Hand Knob on Pol

Configuration – Rugged Cases, 1 each Positioner, Outriggers/Boom, Reflector:

-1220 Motorized Positioner	26" x 24" x 30"	150 lbs.
-Outriggers/Feed Boom	71" x 18" x 17"	105 lbs. (includes Ku feed)
-Reflector Panels	39" x 39" x 24"	170 lbs. Std. 150 lbs. Optional
-C/X Feeds (up to 3/case)	43" x 27" x 20"	70 lbs. typical

Interfaces

-HPA Mounting	Feed boom or behind reflector (additional CFE case or optional case required)
-RF	Coax (2) at base, Flex Waveguide from feed with groove
-Electrical	25 ft. Cable with Connectors for Controller

Set-up Time Less than 30 minutes

Environmental

Wind	- Operational	30 mph gusting to 45 mph
	- Survival	Anchoring required when gusts exceed 35 mph 80 mph (With anchoring in zenith stowed position)
Pointing Loss		1 dB typical, 2 dB max in operational wind (Ku-band)
Temperature	- Operational	+14° to 125°F (-10° to 52°C)
	- Survival	-40° to 140°F (-40° to 60°C)

Buy Now!



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Auto Acquire Tri-Band Motorized FlyAway Antenna System

Controllers

Auto-Acquisition

One-button deploy with auto acquisition, peaking, and cross-pol adjustment using GPS, compass, and level-sensor inputs; certified for auto-commission on certain satellite systems

Tracking

Inclined orbit step-tracking with CFE or optional beacon receiver

Operator Interface

Front panel or Hand Held Remote or Remote PC options

Positioning Accuracy

$\pm 0.2^\circ$

Input Power

Single phase 110/240 60/50 Hz 10 A peak, 2 A continuous

C-Band

Frequency

Receive

3.625-4.20 Ghz

Transmit

5.85 -6.425 Ghz

Polarization

Linear or circular options

Gain (Midband)

36.4 dBi

40.3 dBi

Antenna Noise Temperature @ 20° EI

49° K

G/T with 20°K LNB, Midband

17.9 dB/° K

Radiation Pattern Compliance

IESS-601 and FCC 47CFR25.209

Circular Axial Ratio (within Pointing Cone)

2.3 dB

1.3 dB

Linear Cross Pol Isolation (in Ptg. Cone)

>30 dB

>30 dB

Power Handling Capability

1000 watts per port

X-Band

Frequency

Receive

7.25 7.75 Ghz

Transmit

7.9 - 8.4 Ghz

Polarization

Circular RHCP or LHCP

Gain (Midband)

42.0 dBi

42.8 dBi

Antenna Noise Temperature @ 20° EI

50° K

G/T with 55°K LNB, Midband

21.7 dB/° K

Radiation Pattern Compliance

MIL – STD – 188-164A

Axial Ratio within Tracking Cone

1.21 dB

2.0 dB

Power Handling Capability

1000 watts per port

Ku-Band

Frequency

Receive

10.95-12.75 Ghz

Transmit

13.75-14.5 Ghz

Polarization

Orthogonal Linear, Optional Co-pol Linear

Gain (Midband)

46.0 dBi

47.6 dBi

Antenna Noise Temperature @ 20°

57° K

G/T with 50°K LNB, Midband

25.7 dB/° K

Radiation Pattern Compliance

IESS-601 Std. G and FCC 47CFR25.209

Cross Pol Isolation - on-axis

35 dB

35 dB

- within pointing cone 28 dB standard

30 dB standard

- within pointing cone 25 dB MM option

35 dB MM option

Power Handling Capability

500 watts per port

