

### ANTENNA FEATURES

- Lightweight manual antenna with integral base and folding tripod
- 75cm seven-piece AvL carbon fiber reflector
- Unique azimuth/elevation positioner
- Manual polarization rotation
- Five-minute setup
- Standard feed:
  - Two-Port Ku-Band Precision (fits in basic case pack-up)
- Optional feeds:
  - Two-Port Ka-Band Commercial / Military
  - Two-Port X-Band (WGS) – optional receive/transmit reject filter kit



### MECHANICAL SPECIFICATIONS

<b>Az/EI Drives</b>		Unique azimuth/elevation manual positioner
<b>Polarization Drive System</b>		Manual rotation
<b>Reflector Construction</b>		Seven-piece carbon fiber / aluminum
<b>Axis Travel</b>	<b>Azimuth</b>	±95°
	<b>Elevation</b>	5° to 95°
	<b>Polarization (Ku)</b>	360° continuous
<b>RF Interface</b>	<b>Transceiver Mounting</b>	Rear of reflector
	<b>Coax</b>	Two connectors at amplifiers
<b>Electrical Interface</b>		Connectors at amplifiers
<b>Weight (approximate)</b>		Less than 30 lbs. (13.6 kg)
<b>Cases</b>		One checkable case weighing less than 39 lbs. (17.7 kg) Exterior dimensions: 20.39 L x 11.20 W x 7.21 H in. (51.8 L x 28.4 W x 18.3 H cm)
<b>Setup Time</b>		Less than five minutes

### ENVIRONMENTAL SPECIFICATIONS

<b>Wind – Survival</b>	Anchored	45 mph (72 km/h)
<b>Wind – Operational</b>	With Anchoring	30 mph gusting to 45 mph (48 to 72 km/h)
	Without Anchoring	25 mph (40 km/h)
<b>Pointing Loss in Wind (Ku-Band Receive, Operational Winds)</b>		1 dB typical, 2 dB maximum
<b>Temperature</b>	Operational	-22° to 125° F (-30° to 52° C)
	Survival	-40° to 140° F (-40° to 60° C)

### RF PARAMETERS: KU-BAND (TWO-PORT)

		Receive	Transmit
Frequency Range (GHz)		10.95 – 12.75	13.75 – 14.50
Polarization Configuration		Linear orthogonal standard, optional co-polarization	
Gain (dBi)	Two-Port	37.5	39.0
	Four-Port	--	--
Beamwidth (Degrees)	-3 dB	2.4	2.0
	-10 dB	--	--
Radiation Pattern Compliance		FCC 25.209, ITU-R S.580-6, IESS 208	
Antenna Noise Temperature (Midband, 20° EI)	Two-Port	54° K	--
	Four-Port	--	--
Power Handling Capability		--	75W
G/T Midband, Clear Horizon, Typical		17.3 dB/° K with 50° LNB	--
Axial Ratio		--	--
Feed Port Isolation (Tx to Rx, dB)		35	80 (including filter)
EIRP (40 W P1)		--	55.0 dBW

### RF PARAMETERS: KA-BAND (TWO-PORT)

		Receive	Transmit
Frequency Range (GHz)		19.2 – 21.2	29.0 – 31.0
Polarization Configuration		Circular or Linear	
Gain (dBi)	Two-Port	41.8	45.0
	Four-Port	--	--
Beamwidth (Degrees)	-3 dB	1.4	0.9
	-10 dB	--	--
Radiation Pattern Compliance		FCC 25.209, MIL-STD-188-164C	
Antenna Noise Temperature (Midband, 20° EI)	Two-Port	119° K	--
	Four-Port	--	--
Power Handling Capability		--	50W
G/T Midband, Clear Horizon, Typical		18.3 dB/° K with 100° LNB	--
Axial Ratio		1.5	1.0
Feed Port Isolation (Tx to Rx, dB)		80	80 (including filter)
EIRP (40 W P1)		--	61.2 dBW

### RF PARAMETERS: X-BAND (TWO-PORT)

		Receive	Transmit
<b>Frequency Range (GHz)</b>		7.25 – 7.75	7.90 – 8.40
<b>Polarization Configuration</b>		RHCP or LHCP	
<b>Gain (dBi)</b>	Two-Port	33.5*	34.3*
	Four-Port	--	--
<b>Beamwidth (Degrees)</b>	-3 dB	3.7	3.4
	-10 dB	--	--
<b>Radiation Pattern Compliance</b>		MIL-STD-188-164C	
<b>Antenna Noise Temperature (Midband, 20° EI)</b>	Two-Port	51° K (including optional filter)	--
	Four-Port	--	--
<b>Power Handling Capability</b>		--	100W
<b>G/T Midband, Clear Horizon, Typical</b>		13.2 dB/° K with 55° LNB	--
<b>Axial Ratio</b>		1.21	2.0
<b>Feed Port Isolation (Tx to Rx, dB)</b>		115 (includes optional filter)	115 (includes optional filter)
<b>EIRP (40 W P1)</b>		--	50.3 dBW

\*Not including optional filters.

### OPTIONS – UPGRADES AND SERVICES

- Wind anchoring options: ground stakes, sandbags
- Optional rugged cases
- Additional feed band cases
- Add custom logo on reflector face (one- or two-color, as per AvL logo policy)
- Spare parts kit
- Optional power supply