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MODEL 0613 Manual FlyAway
60 cm Tri-Band Portable Antenna

Reflector	60 cm, 3 piece Carbon Fiber
Optics	Offset, Prime Focus, 0.6 f/D
Interchangeable Feeds	X-CP, Ku-LP, Ka-CP
Positioner Type	Ultra Lightweight Manual with Tripod
Drive System	Unique boom center mounted positioner creates balanced loading for ease of pointing with minimal overhung load. Includes fine adjust in AZ & EL
Mount Geometry	Elevation over Azimuth
Polarization	Rotation of Ku Feed

Mechanical

Travel	
Azimuth	
Coarse	360° Continuous
Fine	+/- 10°
Elevation	
Coarse	0 – 90° +
Fine	0 – 90°
Polarization (Ku)	± 95°
(Reflector/Positioner/Tripod/One Ku Feed/)	**Total Ku Antenna weight: 17 lbs.** **28”L x 11” W x 8”HT (stowed configuration)**

Note: BUC and LNB are CFE

Set-up Time	Less than 5 minutes
RF Interface	
BUC Mounting	Feed Boom, Rear of Reflector, Or Remote
Coax	Two connectors at Amplifiers
Electrical Interface	Connectors at Amplifiers

Environmental

Wind	
Operational	
Without anchoring	20 mph
With anchoring	30 mph gusting to 45 mph
Survival (anchored)	80 mph in zenith (90° elevation) position
Pointing Loss in Wind	
X-band Receive, Operational winds	0.1 dB typical, 0.3 dB max
Ku-band Receive, Operational winds	0.3 dB typical, 0.7 dB max
Ka-band Receive, Operational winds	0.8 dB typical, 2.0 dB max
Temperature	
Operational	-22° to 125° F (-30° to 52° C)
Survival	-40° to 140° F (-40° to 60° C)

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X-Band	Receive	Transmit
Polarization	RHCP or LHCP configurable	LHCP or RHCP configurable
Frequency Range (GHz)	7.25 - 7.75	7.90 - 8.40
Gain (Midband) (dBi)	31.6	32.3
VSWR	1.30:1	1.30:1
Beamwidth (-3 dB)	4.5˚	4.2˚
Radiation Pattern Compliance (beyond mainbeam)	MIL-STD-188-164A	MIL-STD-188-164A
Ant Noise Temperature @ 20° El, midband	57° K	
G/T with 55˚ LNB, midband, clear horizon	10.8 dB/˚ K	
Axial Ratio (CP only, within pointing cone)	1.21 dB	2 dB
Feed Port Isolation – TX to RX (dB)	110 (includes optional filter)	100 (includes optional filter)
Power Handling Capability		1000 watts

Ku-Band	Receive	Transmit
Polarization	Linear orthogonal standard, optional co-pol	Linear orthogonal standard, optional co-pol
Frequency Range (GHz)	10.95 - 12.75	13.75-14.50
Gain (Midband) (dBi)	35.6	37.1
VSWR	1.30:1	1.30:1
Beamwidth (-3 dB)	3.0˚	2.5˚
Radiation Pattern Compliance (Outside mainbeam)	FCC 25.209, ITU-R S.580-6	FCC 25.209, ITU-R S.580-6
Ant Noise Temperature @ 20° El, midband	56° K	
G/T with 50˚ LNB, midband, clear horizon	15.4dB/˚ K	
Cross Pol Isolation, on-axis	35 dB	35 dB
Cross Pol Isolation, within pointing cone	26 dB Standard, 25dB Optional MM feed	27 dB Standard, 35 dB Optional MM feed
Feed Port Isolation – TX to RX (dB)	35	80 (includes filter)
Power Handling Capability		500 watts

Ka-Band	Receive	Transmit
Polarization	Circular (Optional Linear feed available)	Circular (Optional Linear feed Available)
Frequency Range (GHz)	20.2 - 21.2 (military) or 17.7 - 20.2 (commercial option)	30.0 - 31.0 (military) or 27.5 - 30.0 (commercial option)
Gain (Midband military) (dBi)	40.4	43.4
VSWR	1.30:1	1.30:1
Beamwidth (-3 dB)	1.7˚	1.1˚
Radiation Pattern Compliance	FCC 25.209, MIL-STD-188-164A	FCC 25.209, MIL-STD-188-164A
Ant Noise Temperature @ 20° El, midban	111° K	
G/T with 100˚ LNB, midband, clear horizo	17.0 dB/˚ K	
Axial Ratio (CP only, within pointing cone)	1.5 dB	1.0 dB
Feed Port Isolation – TX to RX (dB)	30	80 (includes filter)
Power Handling Capability		250 watts

Controller	Various CAP Options Available such as the RC300 Flyaway Companion Satellite Acquisition Tool
Options	
BUC/LNB mounting	Beacon receiver
Waveguide interconnect options	Wind Anchoring options – ground stakes, sand bags
	Computer Assisted Pointing (CAP)