

FLY-1801



TECHNICAL SPECIFICATIONS

The iNetVu® FLY-1801 Antenna is a 1.8m highly portable, self-pointing, auto-acquire unit that is configurable with the iNetVu® 7710 Controller and can be assembled in less than 20 minutes by one person. The antenna features a 6-piece carbon fibre reflector with compact pedestal and is designed to be cost-effective while providing exceptional performance in a light weight package.



Features

- 6-Piece Carbon Fibre Reflector
- One button, auto-pointing Controller acquires any Ku or C band satellite within 2 minutes
- 3 Axis motorization
- Supports manual control
- Captive Hardware/Fasteners
- No tools required for assembly
- Set-up time less than 20 minutes, one person
- Designed to work with the iNetVu® 7710 Controller
- Leveling capability for uneven surfaces
- Standard 2 year warranty



Application Versatility

Whether you operate in Ku or C band, the 1.8m Flyaway system is easily configured to provide instant access to satellite communications for any application that requires reliable and/or remote connectivity in a rugged environment. Ideally suited for industries such as Disaster Management, Military, Oil & Gas Exploration, Mining, Construction, Mobile Offices and Emergency Services.

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INTEGRATED SATELLITE SOLUTIONS

Specifications are subject to change

May 2016

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Mechanical

Reflector	1.8m offset feed, Carbon Fibre
Platform Geometry	Elevation over Azimuth
Deployment Sensors GPS Antenna	Compass $\pm 2^\circ$, Tilt Sensor $\pm 0.2^\circ$
F/D Ratio	0.80
Azimuth	Full 360° in overlapping, 190° sectors
Elevation	0° to 90°
Polarization	$\pm 95^\circ$
Elevation Deploy Speed	Variable 5° /sec, 2° /sec typ.
Azimuth Deploy Speed	Variable 8° /sec, 2° /sec typ.
Peaking Speed	0.2° /sec
Peaking Accuracy	$\pm 0.1^\circ$
Motor Voltage	24VDC 14.5 Amp (Max.)

Environmental

Wind loading	
Operational (no ballast)	40 km/h (25 mph)
Operational (with ballast)	72 km/h (45 mph)
Temperature	
Operational	-30° to 60° C (-22° to 140° F)
Survival	-40° to 65° C (-40° to 149° F)
Water Ingress Rating	IP-66

Electrical

Rx & Tx Cables	2 RG6 Cables
Control Cables	
Standard	10 m (33 ft) Extension Cable
Optional	Up to 60 m (200 ft) available

RF Interface

Radio Mounting	Feed arm
Coaxial	RG6U
Axis Transition	Rigid/Twist-Flex Waveguide
Electrical Interface	10 m (33 ft) ext. cables w/MIL connectors
VSWR	Rx 1.30:1 Tx 1.30:1

Physical

Total Weight (w Ku Option & Cases) 206 kg (453 lbs)

Packaging Cases:

Case 1: AZ Assembly: 56.9cm x 68.6cm x 71.1cm (22" x 27" x 28"); 43.6kg (96lbs)

Case 2: Tripod Assembly: 35.6cm x 35.6cm x 162.6cm (14" x 14" x 64"); 32kg (70.5lbs)

Case 3: EL Assembly: 66cm x 45.7cm x 139.7cm (26" x 18" x 55"); 35.2kg (77.5lbs)

Case 4: Feedboom Assembly: 114.3cm x 45.7cm x 30.5cm (45" x 18" x 12"); 21.4kg (47lbs)

Case 5: Reflector Case A: 30.5cm x 76.2cm x 106.7cm (12" x 30" x 42"); 18.8kg (41.5lbs)

Case 6: Reflector Case B: 33cm x 76.2cm x 116.8cm (13" x 30" x 46"); 23.4kg (51.5lbs)

Optional Feeds: Choose 1 or more

Case 7: Ku-Linear POL + EL Actuator: 86.4cm x 66cm x 35.6cm (34" x 26" x 14"); 31.6kg (70lbs)

Case 8: C-linear POL: 81.3cm x 50.8cm x 50.8cm (32" x 20" x 20"); 25.4kg (56lbs)

Case 9: C-Circular POL: 109.2cm x 50.8cm x 50.8cm (43" x 20" x 20"); 29.6kg (65.5lbs)

Ku-Band (Linear Orthogonal)

	Receive	Transmit
Transmit Power ⁽¹⁾	1 to 200 watt	
Frequency (GHz)	10.95-12.75 ⁽²⁾	13.75-14.50
Feed Interface	WR75	WR75
Efficiency	70%	70%
Midband Gain (± 0.2 dBi)	45.30	46.50
Antenna Noise Temp. (K)	10° EL= 60 / 20° EL= 53	
Sidelobe Envelope,	1°< θ <20°	29-25 Log θ
Co-Pol (dBi)	20°< θ <26.3°	-3.5
	26.3°< θ <48°	32-25 Log θ
	48°< θ <180°	-10 (Average)
Cross-Polarization on Axis	-35 dB	-35 dB
Within 1dB Beamwidth	-28 dB	-28 dB
Isolation (Port to Port)	30 dB	85 dB

C-Band (Linear)

	Receive	Transmit
Standard Frequency (GHz)	3.40-4.20	5.850-6.725
Feed Interface	WR229	WR137 or Type N
Midband Gain (± 0.3 dBi)	35.40	39.30
Antenna Noise Temp. (K)	10° EL= 43 / 20° EL= 38	
Sidelobe Envelope,	2.5°< θ <20°	29-25 Log θ
Co-Pol (dBi)	20°< θ <26.3°	-3.5
	26.3°< θ <48°	32-25 Log θ
	48°< θ <180°	10 (Average)
Cross-Pol: on Axis	-30 dB	-30 dB
Within 1dB Beamwidth	-26 dB	-26 dB
Isolation (Port to Port)	30 dB	70 dB

C-Band (Circular)

	Receive	Transmit
Standard Frequency (GHz)	3.625-4.20	5.85-6.425
Feed Interface	WR229	Type N
Midband Gain (± 0.4 dBi)	35.4	39.50
Antenna Noise Temp. (K)	10° EL= 55 / 20° EL= 50	
Sidelobe Envelope,	2.8°< θ <20°	29-25 Log θ
Co-Pol (dBi)	20°< θ <26.3°	-3.5
	26.3°< θ <48°	32-25 Log θ
	48°< θ <180°	-10 (Average)
Isolation (Port to Port)	30 dB	70 dB

Shipping Weights & Dimensions

TBD

Notes:

⁽¹⁾ Depending on size and weight of feed arm mounting limitation

⁽²⁾ LNB PLL Type required with stability better than ± 25 KHz

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