

iNetVu[®] FLY-1801

by C-COM Satellite Systems Inc.

STEP
ELECTRONICS
A Division of Av-Comm



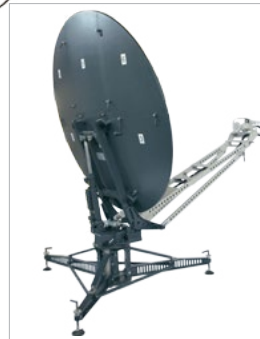
TECHNICAL SPECIFICATIONS

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. 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, C or X 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
- Designed to work with the iNetVu[®] 7710 Controller
- Leveling capability for uneven surfaces
- Standard 2 year warranty



Application Versatility

Whether you operate in Ku, C or X 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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TECHNICAL SPECIFICATIONS

Mechanical

Reflector	1.8m offset feed, Carbon Fibre
Platform Geometry	Elevation over Azimuth
Deployment Sensors GPS Antenna	Compass ± 2°, Tilt Sensor ± 0.2°
F/D Ratio	0.80
Azimuth	Full 360° in overlapping, 200° sectors
Elevation	0° to 90°
Polarization	± 95°
Elevation Deploy Speed	Variable 3° /sec, 2° /sec typ.
Azimuth Deploy Speed	Variable 5° /sec, 2° /sec typ.
Peaking Speed	0.2° /sec
Peaking Accuracy	±0.1°
Motor Voltage	24VDC 15 Amp (Max.)

Environmental

Wind loading	
Operational (no ballast)	40 km/h (25 mph)
Operational (with ballast)	72 km/h (45 mph)
Survival (with ballast)	120 km/h (75 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

Transportable Cases:

- Case 1: AZ Assembly: 47.7 x 50.8 x 68.6cm (18.8" x 20" x 27"); 40.2kg (89lbs)
- Case 2: Tripod Assembly: 52.1 x 154.5 x 34.3cm (20.5" x 61" x 13.5"); 36.4kg (80lbs)
- Case 3: EL Assembly & Feedboom Supports: 49.5 x 138.5 x 67.3cm (19.5" x 54.5" x 26.5"); 39.6kg (87.5lbs)
- Case 4: Feedboom Assembly & Reflector segments: 55.9 x 98.6 x 68.6cm (22" x 38.8" x 27"); 39.6kg (87.5lbs)
- Case 5: Controller (Optional): 4-10U Rack Mount : 74 x 51 x 72 cm (29" x 20" x 28"); 32 kg (70 lbs)
Climate Control case also available

Optional Feeds:

- Case 6: Ku-Linear POL & EL Actuator: 69.9 x 77.0 x 35.1cm (27.5" x 30.3" x 13.8"); 32.5kg (71.5lbs)
- Case 7: C-linear POL & EL Actuator: 75 x 75 x 48.3cm (29.5" x 29.5" x 19"); 46.2kg (102lbs)
- Case 8: C-Circular POL & Actuator: TBD

Shipping Weights & Dimensions

TBD

Antenna Bands

	1 to 200 watt				1 to 500 watt			
	Ku-Linear		C-Linear ⁽³⁾		C-Circular ⁽³⁾		X-Circular ⁽³⁾	
	Receive	Transmit	Receive	Transmit	Receive	Transmit	Receive	Transmit
Transmit Power ⁽¹⁾	1 to 200 watt						1 to 500 watt	
Frequency (GHz)	10.70 - 12.75 ⁽²⁾	13.75 - 14.50	3.40 - 4.20 ⁽²⁾	5.850 - 6.725	3.625-4.20 ⁽²⁾	5.85-6.425	7.25 - 7.75	7.90 - 8.40
Feed Interface	WR75	WR75	WR229	WR137 or Type N	WR229	Type N	WR112	WR112
INSAT Frequency Xpol (GHz)			4.50-4.80	6.275-7.025				
INSAT Frequency Copol (GHz)			4.50-4.80	6.724-7.025				
Efficiency	70%	70%						
Midband Gain (± 0.2dBi)	45.30	46.50	35.40	39.30	(± 0.4dBi) 35.4	39.5		
Antenna Noise Temp. (K)	10° EL = 60 / 20° EL = 53		10° EL = 43 / 20° EL = 38		10° EL = 55 / 20° EL = 50			
Sidelobe Envelope, Co-Pol (dBi)								
1.5° < θ < 20°	29-25 Log θ		2.5° < θ < 20° 29-25 Log θ		2.8° < θ < 20° 29-25 Log θ		DSCS Req	
20° < θ < 26.3°	-3.5		20° < θ < 26.3° -3.5		20° < θ < 26.3° -3.5			
26.3° < θ < 48°	32-25 Log θ		26.3° < θ < 48° 32-25 Log θ		26.3° < θ < 48° 32-25 Log θ			
48° < θ < 180°	-10 (Average)		48° < θ < 180° -10 (Average)		48° < θ < 180° -10 (Average)			
Cross-Polarization on Axis	-35 dB	-35 dB	-30 dB	-30 dB				
Within 1 dB Beamwidth	-28 dB	-28 dB	-26 dB	-26 dB				
Isolation (Port to Port)	30 dB	85 dB	30 dB	70 dB	30 dB	70 dB	≥ 90 dB	≥ 90 dB

Notes:

⁽¹⁾ Depending on size and weight of feed arm mounting limitation ⁽³⁾ Call your C-COM sales representative for availability

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