# FMA-180+



TECHNICAL SPECIFICATIONS

The iNetVu® 180+ Fixed Motorised Antenna system is a self-pointing auto-acquire unit that can be mounted as a permanent installation. Works seamlessly with the auto-pointing iNetVu® 7024 Controller.



#### Features

- 1.8m Offset, prime focus, glass fibre SMC reflector
- Designed to work with the iNetVu® 7024 Controller
- Works seamlessly with the world's most popular commercially available satellite modems
- 2 Axis motorization, 3rd Axis (Polarization) optional
- · Supports manual control when required
- It is a cost effective solution for multi-satellite communication at any location
- One button, auto-pointing controller acquires any Ku, C or X band satellite within 2 minutes
- Locates satellites using the most advanced satellite acquisition methods
- Eliminates costly repointing and network downtime due to inadvertent motion, satellite change, areas where ground shifts occur (earthquakes, landslides, mine blast zones, etc...)
- Can be easily relocated when mounted on a semi-permanent platform without the need for any specialised equipment
- Any compatible fixed installation can be easily converted and upgraded to a fully motorised system
- Supports GD 1.8m antenna, Model 1184
- System designed for 4W and higher BUCs. 10 kg (Max.) weight for RF electronics (BUC and LNB)
- 1Year Warranty

## **Application Versatility**

The FMA-180+ 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 Oil & Gas Exploration, Mining, Disaster Management, Construction, Mobile Offices and Emergency Services.



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by C-COM Satellite Systems Inc.

# TECHNICAL SPECIFICATIONS

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Antenna size 1.8m (71") Reflector Material Glass reinforced polyester SMC 3 axis Motorized, Galvanized steel Platform Type Prime Focus, offset feed Antenna optics Mast size 3.5 SCH 40 pipe (4.0" OD) Elevation range 0° to 90° Azimuth Range 330° (± 165°) ± 90° Polarization Range

# Environmental

Wind loading	
Operational	80 km/h (50mph)
Survival	201 km/h (125mph)
Temperature	
Operational	-30°C to 55°C (-22°F to 130°F)
Survival	-40°C to 65°C (-40°F to 150°F)

### Electrical

Elevation	24V
Azimuth	24V
Rx & Tx Cables	2 RG6 Cables -15m (50 ft) each
Control Cables	
Standard	15m (50 ft) Ext. Cable
Optional	Up to 70m (230 ft) available

Ku-Band	Receive	Transmit
Operating Frequency (GHz)	10.70 - 12.75 <sup>(1)</sup>	13.75 - 14.50
(Optional)	10.70 - 11.45	12.75 - 14.50
Midband Gain (± .2dB)	45.00	46.50
Antenna Noise Temp. (K)	10° EL= 44 / 40° E	L= 33
Sidelobe Envelope Co-Pol (dBi)		
Mainbeam <Θ<7°	29-25 LogΘ	
7° <Θ< 9.2°	+8	
9.2° <Θ <48°	32-25 LogΘ	
48° <Θ <180°	-10 Ave.	
Cross Polarization	> -30 dB on axis	
Feed Interface	WR 75	WR 75
VSWR	1.3:1 (Max.)	

**Note:**  $^{(1)}$  LNB PLL Type required with stability better than  $\pm$  25 KHz

C-Band (Linear)	Receive	Transmit
Operating Frequency (GHz)	3.625 - 4.20 <sup>(1)</sup>	5.845 - 6.725
INSAT Frequency (GHz)	4.50-4.80	6.725-7.025
Midband Gain (± .2dB)	35.50	39.50
Antenna Noise temp.(K)	10° EL= 56 / 40° EL=46	
Sidelobe Envelope Co-Pol (dBi)		
Mainbeam <Θ<7°	29-25 LogΘ	
7° <Θ< 9.2°	+8	
9.2° <Θ <48°	32-25 LogΘ	
48° <Θ <180°	-10 Ave.	
Cross Polarization	> -30 dB on axis	
Feed Interface	CPR 229 F	CPR 137 or type N
VSWR	1.3:1 (Max.)	

C-Band (Circular)	Receive	Transmit
Operating Frequency (GHz)	3.625 - 4.20 <sup>(1)</sup>	5.85 - 6.425
Midband Gain (± .2dB)	35.50	39.90
Antenna Noise Temp. (K)	10° EL=30 / 40° EL=20	
Sidelobe Envelope Co-Pol (dBi)		
Mainbeam <Θ<7°	29-25 LogΘ	
7° <Θ< 9.2°	+8	
9.2° <Θ <48°	32-25 LogΘ	
48° <Θ <180°	-10 Ave.	
Feed Interface	CPR 229 F	CPR 137 or type N
VSWR	1.3:1 (Max.)	

X-Band (Circular)	Receive	Transmit
Operating Frequency (GHz)	7.25 - 7.75 <sup>(1)</sup>	7.90 - 8.40
Midband Gain (± .5dB)	40.90	41.60
Antenna Noise Temp. (K)	10° EL=43 / 30° EL=	=35
Sidelobe Compliant with	DSCS Req.	
Feed Interface	WR-112	WR-112
VSWR	1.25:1	1.25:1
Isolation (dB)	20	20

## Shipping Weights & Dimensions\*

Pallet 1: FMA 1.8m Ku, C or X band System with 3rd axis motorization on skid  $183 \text{ cm} \times 109 \text{ cm} \times 66 \text{ cm} (72"x43"x26"); 195 \text{ Kg} (430 \text{ lbs});$ 

Pallet 2: FMA 1.8m Reflector on skid

208.3 cm x 208.3 cm x 35.6 cm (82"x82"x14"); 80.3 Kg (177 lbs);

System Net Weight: 145.2 kg (320 lbs) Reflector Net Weight: 37.0 kg (81.5 lbs)

\*The shipping weights/dims can vary for particular shipments depending on actual system configuration, quantity, packaging materials and special requirements

