

1800+

TECHNICAL SPECIFICATIONS

The iNetVu® 1800+ Drive-Away Antenna is a 1.8m auto-acquire satellite antenna system which can be mounted on the roof of a vehicle for direct broadband access over any configured satellite. The system works seamlessly with the iNetVu® 7000B/C Controller providing fast satellite acquisition within minutes, anytime anywhere.



Features

- One-Piece precision offset, thermoset-molded reflector with back cover
- Optional 2pcs and 4pcs reflector available
- Heavy duty feed arm capable of supporting up to 11 kg (25 lbs) RF Electronics (LNB & BUC)
- Designed to work with the iNetVu® 7000B/C controller
- Works seamlessly with the world's most popular commercially available satellite modems
- 3 Axis motorization
- Supports manual control when required
- One button, auto-pointing controller acquires any Ku or C band satellite within 2 minutes
- Locates satellites using the most advanced satellite acquisition methods
- Supports Skyware Global 1.8m antenna Type 183
- Standard 2 year warranty

Application Versatility

Whether you operate in Ku or C band, the 1800+ 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, Military Communications, Disaster Management, SNG, Emergency Communications Backup, Cellular Backhaul and many others.



Digisat International Inc.
4195 W. New Haven Ave., Suite 15
Melbourne, FL 32904
USA
+1 321 676 5250
Email: sales@digisat.org
<http://www.digisat.org>

1800+

TECHNICAL SPECIFICATIONS

Mechanical

Reflector	1.8m prime focus, offset feed, SMC ⁽¹⁾
Mount Geometry	Elevation over Azimuth
Deployment Sensors GPS Antenna	Compass $\pm 2^\circ$, Tilt Sensor $\pm 0.2^\circ$
F/D Ratio	0.61
Azimuth	Full 360° in overlapping, 200° sectors
Elevation	0° to 75°
Polarization	$\pm 90^\circ$
Elevation Deploy Speed	Variable 2°/sec typ.
Azimuth Deploy Speed	Variable 15°/sec typ., 10°/sec typ.
Peaking Speed	0.1°/sec
Motor Voltage	12VDC 15 Amp (Max.)

Environmental

Wind loading	
Operational	72 km/h (45 mph)
Survival	
Deployed	112 km/h (70 mph)
Stowed	225 km/h (140 mph)
Temperature	
Operational	-32° C to 55° C (-26° F to 130° F)
Survival	-40° C to 65° C (-40° F to 150° F)

Electrical

Rx & Tx Cables	2 RG6 Cables
Standard	9.1 m (30 ft) Extension Cable
Optional	Up to 45 m (150 ft) available

RF Interface

Radio Mounting	Feed arm/ Inside vehicle
Coaxial	RG6U from feedhorn to base controller
Axis Transition	Twist-Flex Waveguide
Electrical Interface	9.1m (30 ft) ext. cables w/MIL connectors
VSWR	Rx 1.5:1 Tx 1.3:1

Physical

Mounting Plate	L: 132 cm (52")	W: 71 cm (28")
Stowed Dimensions	L: 249 cm (98")	W: 188 cm (74")
	H: 67 cm (26.4")	
Max. Deployed Height	248 cm (97.6")	
Total Weight (w reflector)	162 Kg (358 lbs)	
Reflector Weight	37 Kg (81 lbs)	
Total Platform Weight	55 Kg (341 lbs)	

Optional Cases:

1 case (2pcs reflector): 207cm x 102.9 cm x 50.8 cm (81.5" x 40.5" x 20")
Total weight w/reflector: 104.8 kg (231lbs)
2 cases (4pcs reflector): 104.1 cm x 99.1 cm x 34.3cm (41" x 39" x 13.5")
Total weight w/reflector: 90.7 kg (200 lbs)

Ku-Band (Linear Orthogonal)

	Receive	Transmit
Transmit Power	(1 to 200 watt ⁽²⁾)	
Frequency (GHz)	10.70-12.75	13.75-14.50
Feed Interface	WR75	WR75
Efficiency	70%	70%
Midband Gain (± 0.2 dBi)	45.30	46.80
Antenna Noise Temp. (K)	10° EL= 43 / 20° EL= 28 / 30° EL=23	
Sidelobe Envelope, Co-Pol (dBi)		
1°< θ <20°	29-25 Log θ	
20°< θ <26.3°	-3.5	
26.3°< θ <48°	32-25 Log θ	
48°< θ <180°	-10 (Average)	
Cross-Polarization on Axis	-30 dB	
Within 0.5 dB Beamwidth	-26 dB	
Isolation (Port to Port)	35 dB	80 dB

C-Band (Linear)

	Receive	Transmit
Standard Frequency (GHz)	3.4-4.2	5.850-6.725
INSAT Frequency (GHz)	4.5-4.8	6.725-7.025
Feed Interface	WR229	WR137 or Type N
Midband Gain (± 0.3 dBi)	35.40	39.30
Antenna Noise Temp. (K)	10° EL= 41 / 20° EL= 36 / 30° EL=33	
Sidelobe Envelope, Co-Pol (dBi)		
2.5°< θ <20°	29-25 Log θ	
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	
INSAT Axis	-35 dB	
Tx/Rx Isolation	60 dB	60 dB

C-Band (Circular)

	Receive	Transmit
Standard Frequency (GHz)	3.625-4.20	5.85-6.425
Feed Interface	WR229	WR137 or Type N
Midband Gain (± 0.4 dBi)	35.40	39.50
Antenna Noise Temp. (K)	10° EL= 41 / 20° EL= 36 / 30° EL= 33	
Sidelobe Envelope, Co-Pol (dBi)		
2.8°< θ <20°	29-25 Log θ	
20°< θ <26.3°	-3.5	
26.3°< θ <48°	32-25 Log θ	
48°< θ <180°	-10 (Average)	
Isolation	60 dB	60 dB

Shipping Weights & Dimensions

Mount Crate: 213 cm x 89 cm x 84 cm (84" x 35" x 33"), 183 kg (401 lbs)
Dish Crate: 211 cm x 211 cm x 41 cm (83" x 83" x 16"), 131 kg (288 lbs)
Total, Mount Crate and Dish Crate, 2 – Pieces: 313 kg (689 lbs)