

iNetVu™ 1800 Technical Specifications



Electrical

Ku-Band (Linear)

Feed Horn LNB & Tx Cable	2 RG6 cables for Tx & Rx (15'/each)	
Transmit (Tx) Frequency	13.75 - 14.50 GHz	
Receive (Rx) Frequency	10.70 - 12.75 GHz	
Feed Interface	<u>Receive</u> WR75	<u>Transmit</u> WR75
Midband Gain (+ .2dB)		
Rx	45.0 / 45.3 dBi	
Tx	47.0 dBi	
Antenna Noise Temperature		
10° Elevation	55 K	
30° Elevation	50 K	
Sidelobe Envelope, Co-Pol (dBi)	<u>Receive</u>	<u>Transmit</u>
	1° < θ < 20°	29 - 25 Log θ dBi
	20° < θ < 26.3°	-3.5 dBi
	26.3° < θ < 48°	32-35 Log θ dBi
	48° < θ	-10 dBi (averaged)
Cross-Polarization	<u>Receive</u>	<u>Transmit</u>
On Axis	30 dB	30 dB
Within 1 dB Beamwidth	22 dB	26 dB

X-Band (Circular)

Transmit (Tx) Frequency	7.9 - 8.4 GHz	
Receive (Rx) Frequency	7.25 - 7.75 GHz	
Feed Interface	<u>Receive</u> WR112	<u>Transmit</u> WR112
Midband Gain (+ .2dB)		
Rx	41.5 dBi	
Tx	42.2 dBi	
Antenna Noise Temperature		
10° Elevation	38 K	
30° Elevation	35 K	
Sidelobe Envelope, Co-Pol (dBi)	<u>Receive</u>	<u>Transmit</u>
	1° < θ < 20°	29 - 25 Log 0 dBi
	20° < θ < 26.3°	-3.5 dBi
	26.3° < θ < 48°	32 - 35 Log 0 dBi
	48° < θ	-10 dBi (averaged)
Cross-Polarization	<u>Receive</u>	<u>Transmit</u>
On Axis	23 dB	21 dB
Within 1 dB Beamwidth	23 dB	21 dB

C-Band (Linear)

Transmit (Tx) Frequency	5.700 - 6.725 GHz	
Receive (Rx) Frequency	3.4 - 4.2 GHz	
Feed Interface	<u>Receive</u> WR229	<u>Transmit</u> WR137
Midband Gain (+ .2dB)		
Rx	36.0 dBi	
Tx	39.8 dBi	
Antenna Noise Temperature		
10° Elevation	55 K	
30° Elevation	50 K	
Sidelobe Envelope, Co-Pol (dBi)	<u>Receive</u>	
	29 - 25 log θ	
	-3.5	
	32 - 35 log θ	
	-10	
Cross-Polarization	<u>Receive</u>	<u>Transmit</u>
On Axis	30 dB	30 dB
Within 1 dB Beamwidth	22 dB	25 dB

C-Band (Circular)

Transmit (Tx) Frequency	5.850 - 6.425 GHz	
Receive (Rx) Frequency	3.625 - 4.200 GHz	
Feed Interface	<u>Receive</u> WR229	<u>Transmit</u> WR137
Midband Gain (+ .2dB)		
Rx	35.6 dBi	
Tx	39.5 dBi	
Antenna Noise Temperature		
10° Elevation	65 K	
30° Elevation	60 K	
Sidelobe Envelope, Co-Pol (dBi)		<u>Transmit</u>
		1° < θ < 20°
		20° < θ < 26.3°
		26.3° < θ < 48°
		48° < θ
Cross-Polarization	<u>Receive</u>	<u>Transmit</u>
On Axis	15.3 dB	17.7 dB
Within 1 dB Beamwidth	15.3 dB	17.7 dB

iNetVu™ 1800 Technical Specifications



RF Interface

Radio Mounting	Feed Arm / Rear of Base / Inside Vehicle
Axis Transition	Twist-Flex Waveguide
Waveguide	WR75 Cover Flange Interface
Coaxial	RG6U from Feedhorn to Base Controller
Electrical Interface	Connectors for Controller, 10m ext. Cable

Motors

Electrical Interface	12 V DC 15A Max.
----------------------	------------------

Maximum Mount Rotation

Azimuth	Full 360° in overlapping 200° sectors
Elevation	0-80°
Polarization	± 90°
Elevation Deploy Speed	Variable 2° /sec typ
Azimuth Deploy Speed	Variable 1.5° /sec typ, 1.0° /sec typ
Peaking Speed	0.1° /sec

Mechanical

Reflector	1.8 m Offset Feed
Mount Geometry	Elevation over Azimuth
Deployment Sensors	GPS Antenna Compass ± 2° Tilt Sensor ± 0.2°

Physical

Mounting Plate	L: 52" (1321mm) W: 28" (711mm)
Stowed Dish Ext. Dims	L: 98.1" (2491.74mm) W: 80" (2032mm) H: 26.4" (670.56mm)
Deployed Height	97.8" (2484mm)
Weight	320 lbs (145.15 kg)

Environmental Survival

Wind Deployed	70 mph (112km/hr)
Wind Stowed	140 mph (225 km/hr)
Temperature	-40° F to 150° F (-40° C to 70° C)

Operational

Wind	45 mph (70 km/hr)
Temperature	-20° F to 140° F (-32° C to 60° C)