1501+



TECHNICAL SPECIFICATIONS

The iNetVu® 1501+ Drive-Away antenna system is a sleek, simple to operate auto-deploy VSAT terminal which can be mounted on the roof of a vehicle. It is suitable for the most demanding applications. Its reflector optics feature a long focal length for excellent cross-pol performance. All three motorized axes have very low backlash and work together seamlessly with sophisticated integral sensors and the iNetVu® 7715 Controller to ensure excellent pointing accuracy.



Features

- 1.5m Offset, prime focus, carbon fibre reflector
- · Low stow height
- 35 dB crosspol for large carrier uplinking
- Designed to work with the iNetVu® 7715 Controller
- Supports hand cranks when required
- Supports up to 200W Redundant BUC directly on feed arm
- One button, auto-pointing controller acquires any satellite within 2 minutes
- Optimal high-precision antenna pointing
- Includes jog controller functions
- Remote access and operation via network, web and other interfaces
- Modular design makes all major aspects of the antenna field serviceable
- Standard 2 year warranty

Application Versatility

The 1501+ Drive-away 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 applications that require a quick, simple set-up typically for industries such as SNG, Disaster Management, Oil & Gas Exploration, Mining, Construction, Mobile Offices and Emergency Services.



1501+



by C-COM Satellite Systems Inc.

TECHNICAL SPECIFICATIONS

Mechanical

Reflector Size & Material 1.5m Carbon Fibre
Platform Geometry Elevation over Azimuth

Offset Angle 16.97°

Antenna Optics One-piece offset feed, prime focus

Azimuth Travel ± 200°
Elevation Look Angle 0° to 90°
Polarization Travel ± 95°
Elevation Deploy Speed 2°/sec
Azimuth Deploy Speed 6°/sec
Peaking Speed 0.2°/sec

Motor Voltage 24 VDC 10 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
 -30° to 55° C (-22° to 131° F)

 Survival
 -40° to 65° C (-40° to 149° F)

 Solar Radiation
 1000Kcal/h/m (360 BTU/h/sq. ft.)

Rain 10 cm/h (4 in/h) Humidity 0-100% (condensing)

Thermal Test per MIL-STD-810H, Methods 501.7/502.7 High/Low Temperatures, Vibration Test per MIL-STD-810H, Method 514.8 Procedure I, Category 4, Truck/Trailer/Tracked, Shock Test per IEC 60068-2-27 Edition 4.0

Dust and Water Ingress IP65 per IEC 60529 Edition 2.2

Electrical

Rx & Tx Cables 2 RG6 Cables - 10 m (33 ft) each

Control Cables

Standard 10 m (33 ft) Extension Cable Optional Up to 60 m (200 ft) available

RF Interface

Radio Mounting Feed arm/Inside vehicle Coaxial RG6U F Type

N Type (optional)

Axis transition Rotary Joint +Twist-Flex Waveguide

Physical

Reflector Weight

Platform Weight

Total Platform Weight

Stowed dimensions L: 216 cm (85.0") W: 149 cm (58.7")

H: 41 cm (16.1") 11.3 kg (25 lbs) 70 kg (154 lbs) 81.3 kg (179 lbs)

Shipping Weights & Dimensions*

Platform Crated: 211 cm x 41 cm x 61 cm (83" x 16" x 24"), 118 kg (260 lbs) Reflector Crate: 168cm x 168cm x 48cm (66" x 66" x 19"), 116.3 kg (256 lbs) Total Weight: 234.3 kg (516 lbs)

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

• 1 to 125 watt

Antenna Bands

VSWR

Transmit Power (1) 1 to 400 watt Feed 2 Port XPol

Ku-Linear Receive Transmit Frequency (GHz) 10.70 - 12.75⁽²⁾ 13.75 - 14.50 Optional 10.70 - 11.70 12.75 - 14.50 Feed Interface WR75 WR75 Midband Gain Co-Pol (± 0.2dBi) 43.70 45.00 Antenna Noise Temp. (K) $10^{\circ} EL = 65 / 20^{\circ} EL = 58$

Sidelobe Envelope, Co-Pol (dBi) 1.5°<Θ<20° Meets ITU 580, INTELSAT 20°<Θ<26.3° -3.5

 $26.3^{\circ} < \Theta < 48^{\circ} \\ 48^{\circ} < \Theta < 180^{\circ} \\ \text{Cross-Polarization on Axis} \\ \text{Within 1dB Beamwidth} \\ \text{Tx/Rx Isolation}$ $32-25 \text{ Log }\Theta \\ -10 \text{ (Typical)} \\ > 35 \text{ dB} \\ > 30 \text{ dB} \\ \text{Tx/Rx Isolation}$

Notes: (1) Depending on size and weight for feed arm mounting limitation (2) LNB PLL Type required with stability better than ± 25 KHz

1.3:1

(3) Call your C-COM sales representative for availability (4) Offered on platforms only

35 dB

1.3:1

C-Linear (Std/INSAT) (3)

Transmit

37.20

10° EL = 45 / 20° EL = 40

5.850 - 6.725

6.725 - 7.025

N or CPR-137

Receive

3.40 - 4.20⁽²⁾

IESS 601 STD G

32-25 Log Θ

-10 (Typical)

> 30 dB

> 26 dB

 $> 60 \, dB$

1.5:1

90 dB

1.3:1

4.50 - 4.80

CPR-229

33.40

-3.5

 X Band (3)

 Receive
 Transmit
 Receive

 7.25-7.75
 7.90-8.40
 17.70 - 21.2(2)

 WR42

DSCS Req.



1.25:1 (Max.)

Draft