The EXPLORER 7120 is a 1.2m Ku-band drive-away antenna. Its low stow height and light weight design enables easy installation on a variety of smaller vehicles including SUVs and vans.

This auto-deploy system allows personnel with minimal satellite experience to easily configure and operate the 7120 terminal enabling the user to access any broadband application over satellite.

Ideal for Oilfield Services, Emergency Response or Mobile Office applications.

Overview

Providing a 1.2m auto-deploy drive-away terminal for Ku-band VSAT communications, the EXPLORER 7120 is a high performance and versatile antenna that will fit virtually any vehicle or trailer. The EXPLORER 7120 can be configured with any of Network Innovations Ku VSAT offerings.

Field Communication

EXPLORER 7120 provides crucial Internet connectivity for a diverse user base including Oilfield Service, Defence, Homeland Security, Law Enforcement, Emergency Response, Media, Telemedicine, Insurance, Remote Office and Mining.

Compact and Low-Profile

EXPLORER 7120 provides a compact, low-profile and cost-effective motorized VSAT antenna ideal for use on a wide range of vans or trailers. The included mounting pallet comes with an optional roof rack or rail interface for further installation flexibility, so regardless of your vehicle type, with EXPLORER 7120 drive-away VSAT you are ready to connect the moment you arrive on scene.

High Precision Auto-Deploy

EXPLORER 7120’s one-touch antenna controller makes it easy to use and simple to configure. The controller

is equipped with a built-in RF Tuner, Compass, GPS, and inclined orbit satellite tracking for precise and flexible positioning wherever you are and whatever vehicle you are in.

Web Interface

You can easily configure and remotely monitor EXPLORER 7120's satellite auto-acquisition via the user-friendly, graphical user interface (GUI) on a standard web browser – no need for a separate display. Straightforward monitoring with EXPLORER 7120's TracLRI Live Remote Interface means you can check satellite performance easily – by PC, tablet or smartphone – ensuring your ability to stay connected.

System Features:

- Rugged, Reliable 1.2m Ku-band Drive-Away Antenna
- Low stow height of 38 cm (15")
- Solid Resin Fiber Composite Reflector: High EIRP, High- Performance
- Mechanical Drive systems including Zero-Backlash Az/El Cable Drive, and Precision Polarization Drive
- WR-75 Flex WaveGuide to BUC interface
- Inclined orbit satellite tracking
- Manual override capability for emergency use

Antenna Characteristics	Ku Linear	
	Receive	Transmit
Frequency (GHz)	10.95 -12.75	13.75 -14.5
Antenna Gain (dBi ± 0.2)	41.6	43.1
VSWR	1.3:1	1.3:1
Cross Pol Isolation (dB) On-Axis	35	35
Cross Pol Isolation (dB) Off-Axis	27	28
Feed Port Isolation – Tx to Rx (dB)	35	80
Beamwidth (degrees)		
-3dB	1.5	1.2
-10dB	2.7	2.2
Antenna Noise Temperature (°K) at 20° Elevation	54°	
Radiation Pattern Compliance	FCC §25.209, ITU-R S.580-6	
Polarization	Linear Orthogonal Std Optional Co-pol	
Standard BUC Options	4W, 8W, 16W	
Environmental		
Wind Speed – Operational	72 km/h (45 mph)	
	105 km/h (55 mph) 129 km/h	

– Survival (deployed) (stowed)	105 km/h (65 mph) 129 km/h (80 mph)
Temperature – Operational	-30° to +52°C (-22° to 125°F)
– Survival	-40° to +60°C (-40° to 140°F)
Rain	<100 mm/hr
Humidity	0 to 100% (condensing)
Electrical	
RF	Rx and Tx: Type F (75-ohm) connectors
Interfacility Link	9.14m (30 ft) Dual RG6 Coax, 1 Control Cable
Motors	24VDC Servo w/ Optical Encoder, Constant Torque
Controller (1RU) Power Supply	90 – 264 VAC, 50/60Hz Single Phase 300W standard; 1000W option available
Power Consumption	Motors Active – 250 Watts Motors Idle – 30 Watts
BUC Mounting	Feed Boom (maximum weight 7.3 kg / 16 lbs.)
Waveguide	90° WR75 Waveguide Rotary Joint @ Feed TX Input
Emergency Drive	Handcrank on Az & El; Knob on Pol