EXPLORER 3120

1.2 Meter, Multi-Band Manual Fly-Away Antenna System

September 2014 Product Sheet

The most important thing we build is trust





EXPLORER 3120

This EXPLORER 3120 provides an excellent light weight, Manual Fly-Away antenna solution with a 2 piece segmented reflector. The low profile pedestal design provides excellent performance and the complete system transports in two ruggedized shipping cases.

System Features

- Feeds for Ku, C and X Bands Available
- Pre-Assembled Tripod Base Mount
- 2 Piece SMC reflector
- Leveling Feet for uneven surfaces
- Fine-Tune Azimuth / Elevation Adjustment
- Intelsat and Eutelsat Compliant
- 15 Minute Setup

About SATCOM Land Products

Cobham SATCOM Land offers a diverse array of turn-key satellite terminals that fulfill critical communications needs and reduce system configuration requirements for end users. The solutions we provide offer a wide variety of data-rates in multiple frequency bands including L, Ku, Ka, and X-bands. Systems are available as manual, or auto-deploy configuration, and are organized in drive-away, flyaway and common-the-move (COTM) families. When traditional communication technologies are unavailable or fail, our products provide high quality VoIP, RoIP, FAX, data, and multimedia communications that work efficiently across satellite links. We specialize in assisting partners with integrated end-to-end solutions for rapid deployment to support disaster recovery, continuity of operations and other mission critical applications.

Markets

- Military
- Homeland Security
- Emergency Response
- Law Enforcement
- Media: Live Streaming Video, TV Broadcasting
- Telemedicine: Critical Medical Information Transmission
- Mobile Insurance Claims & Settlements
- Remote Office Communications
- Energy and Mining

Applications

- Continuity of Business Operations
- Remote Business Videoconferencing
- Internet Cloud Services: Voice, Radio, Data, Fax, Live Broadcast

Assembly Time 15 Minutes (typical)

Reflector

Size	1.2m Glass Fiber Reinforced Polyester	
Optics	Ring FocusOffset	
Polarization	2 Port Circular / Linear - Band Dependent	

Mechanical

Mechanical		
Axis Drive System	3-Axis Positioner	
Mount Geometry	Elevation over Azimuth	
Travel Azimuth Elevation Polarization	360° continuous with fine adjust 0° to 90° of reflector bore sight Manual, ±90°	

Weights & Measures

Packaging (2 Cases)	
Pedestal Case:	37.5" x 27.5" x 14.5" (100 lbs)
Reflector Case:	51" x 31.5" x 13.5" (95 lbs)

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Antenna Characteristics		Ku-Band	
Feed		2 Port Linear	
reeu	Rx	10.7 - 12.75	
Frequency (GHz)	Tx	13.75 - 14.5	
	Rx	41.7	
Gain (Midband) (dB)	Tx	43.2	
	Rx	≥ 30	
Cross Polarization Isolation (dB)	Tx	≥ 30	
NCMD	Rx	1.35:1	
VSWR	Tx	<1.30:1	
Port to Port Isolation (dP) Ty/Py	Rx	-85 dB	
Port to Port Isolation (dB) Tx/Rx	Tx	0 dBm input	
Port to Port Isolation (dB) Tx/Rx	Rx	-85 dB	
POIL to Poil Isolation (ub) Tx/Rx	Tx	0 dBm input	
Sidelobe Performance	Com	Compliant with ITU-R S.580, FCC	
Port Configuration 2 Port Cross I		2 Port Cross Pol	

Environmental	
Wind Speed - Operational - Survival	30 mph Gusting to 45 mph (48 kph G 72 kph) 60 mph (96 kph) with tie downs / any position
Operating Temperature	-30 to 60°C (-22 - 140°F)
Storage Temp	-40 to 70°C (-40 - 158°F)
Rain - Operational - Survival	4 in/h (10 cm/h) 6 in/h (15 cm/h)
Humidity	0 to 100% (condensing)
Solar Radiation	360 btu/h/ft2 (1000 Kcal/h/m2)
Radial Ice (survival)	1 in (25.4 mm)
Corrosive Atmosphere	As encountered in coastal and/or industrial areas

For further information please contact:

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