

# EXPLORER 3075

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

April 2014 Data Sheet

The most important thing we build is trust

# COBHAM



## EXPLORER 3075

This 3-axis Manual Fly-Away system provides users with a lightweight, ruggedized, and modular mobile terminal capable of X, Ku and Ka-band operation. Its ease of use allows for operators with minimal satellite experience to access any broadband application within ten minutes.

### System Features

- Modular design allows easily field-changable feed/RF chain
- Multiple bands and G/T & EIRP levels
- Transport: One-Man Carry
- Rugged, lightweight

Network configurations also exist for Inmarsat Global Xpress, Avanti, and Hylas.

### 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**      Approximately 10 Minutes (typical)

### Reflector

Size	75 cm Carbon Fiber Reinforced Polymer (CFRP)
Optics	Axis-Symmetric Stepped Ring Focus
Construction	Multi-Segment, Multi-band shaped parabolic
Polarization	2 Port Circular / Linear - Band Dependent

### Mechanical

Axis Drive System	3-Axis Positioner (manual point)
Mount Geometry	Elevation over Azimuth
Travel	
Azimuth	±15° Fine-Tuning
Elevation	0° to 85°
Polarization	±90° Manual Linear Adjustment RH / LH Circular Selection

### Weights & Measures

Antenna*	12 kg (26.5 lbs) (for Ku-band configuration with 8W BUC and LNB)
Antenna with Soft Backpack	18.5 kg (40 lbs)
Hardcase containing Antenna and Soft Backpack	29 kg (64 lbs) Shipping Dimensions: 86.4 L x 61 W x 51 H cm (34" x 24" x 20") Airline checkable (IATA-compliant)

\*Dependent on BUC/LNB configuration  
Specifications Subject to Change Without Notice.

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Antenna Characteristics		Ka-Band Military	Ka-Band Commercial	Ku-Band	X-Band*
Feed		2 Port Circular		2 Port Linear	2 Port Circular
Frequency (GHz)	Rx	20.2 - 21.2	19.2 - 20.2	10.95 - 12.75	7.25 - 7.75
	Tx	30.0 - 31.0	29 - 30	13.75 - 14.5	7.90 - 8.40
Gain (dBi ± 0.2)	Rx	41.5	41.0	36.9	33
	Tx	44.7	45.5	38.5	33.7
Cross Pol Isolation (CP) / Axial Ratio (AR) (dB)	Rx	1.5 (AR)	1.5 (AR)	30 (CP)	2.0 (AR)
	Tx	1.0 (AR)	1.5 (AR)	30 (CP)	2.0 (AR)
G/T - Comm @ 30° EL, Midband (dB/K)		17.3	17.0	15.7	11.5
Standard BUC options (Watts)		5	5	8 / 16	10 / 20
System EIRP (dBW)		51.5	51.3	47.5 / 50.5	43.7 / 46.7

\* Military X-band available

## Environmental

Wind Speed - Operational	40 km/h (25 mph) (not anchored) 48 km/h (30 mph), gusts up to 72 km/h (45 mph) (anchored)
Temperature - Operational	-25° to +55°C (-13° to +131°F)
- Survival	-40° to +80°C (-40° to +176°F)
Rain	<100 mm/hr
Humidity	0 to 100% (condensing)

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Hard Case



Backpack Inside Hard Case



Backpack

## About EXPLORER 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, fly-away and comm-on-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.



Inside Backpack



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