EXPLORER 3075

0.75m Multi-Band Manual Fly-Away Antenna System



November 2017 Product Sheet

The most important thing we build is trust



EXPLORER 3075

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

Versatile system

EXPLORER 3075 can be used on Ku-band networks and for NewsSpotter services on KA-SAT. By simply switching the feed assembly and modem, EXPLORER 3075 can be transformed into an Inmarsat GX terminal. The tripod, the manual panning head and the reflector panels are shared components.

Reliable EXPLORER

EXPLORER 3075 is developed completely in-house by Cobham SATCOM. It features genuine EXPLORER design, which is already established and proven with Cobham SATCOM's highly regarded EXPLORER BGAN and VSAT terminals. Its unique design and system versatility ensures high-quality connectivity, which means you can count on EXPLORER 3075 to provide you with vital communication whatever the conditions.

Applications

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

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

System Features

- Modular design allows easily field-changeable feed/RF chain to Ku-band or Inmarsat GX
- Multiple bands and G/T & EIRP levels
- 4-Piece Carbon Fiber Reflector
- 0.75m Axis-Symmetric Reflector
- Rugged and lightweight (<23 lbs / 10.4 kg)
- Single Case Configuration, Airline Checkable
- Available in Ku-band and Ka-band
- Fast assembly and easy pointing
- Lightweight Tripod and Panning Head

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0.75m Multi-Band Fly-Away Antenna System

Antenna Characteristics		Ka-Band KA-SAT (Eutelsat)	Ka-Band GX (Inmarsat)	Ku-Band
Feed		2 Port Circular	2 Port Circular	2 Port Linear
Frequency (GHz)	Rx	19.7 - 20.2	19.2 - 20.2	10.7 - 12.75
	Tx	29.5 - 30	29 - 30	13.75 - 14.5
C_{sign} (dBi + 0.2)	Rx	41.0	41.0	36.9
Gain (dBi ± 0.2)	Tx	45.5	44.5	38.5
Cross Dol Isolation (CD) (Avial Datia (AD) (dD)	Rx	1.5 (AR)	1.5 (AR)	30 (CP)
Cross Pol Isolation (CP) / Axial Ratio (AR) (dB)	Tx	1.5 (AR)	1.0 (AR)	30 (CP)
Delevization	Rx		LHCP	
Polarization	Tx		RHCP	
G/T - Comm @ 30° EL, Midband (dB/°K)		17.0	17.3	15.7
Standard BUC options (Watts)		3	5	20
System EIRP (dBW)		50.3	51.5	51.5
Product number		TS3075210	407164A-00500	TS3075134

Assembly Time

Approximately 8 Minutes (typical)

Reflector	
Size	0.75 m Carbon Fiber Reinforced Polymer (CFRP)
Optics	Axis-Symmetric Stepped Ring Focus
Construction	Multi-Segment, Multi-band shaped parabolic

Mechanical	
Axis Drive System	2-Axis Positioner (manual point), polarization adjustment for Ku-Band
Mount Geometry	Elevation over Azimuth
Travel - Azimuth - Elevation	±14° Fine-Tuning 0° to 90°

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)	



Weights & I	Measures	
Terminal	KA-SAT	10.4 kg (<23 lbs) with 3W eTRIA
	Ku-Band	16.5 kg (37 lbs) with 20W BUC
Packaging	KA-SAT	1 Case, airline checkable (IATA-compliant)
		Case weight and shipping dimensions: 79.5 L x 51.8 W x 31 H cm (31,3" x 20,4" x 12,2") <23 kg (<51 lbs)
	Ku-Band	2 Cases, airline checkable (IATA-compliant)
		Case 1: reflector + tripod + panning head Shipping dimensions and weight: 79.5 L x 51.8 W x 31 H cm (31,3" x 20,4" x 12,2") <23 kg (<51 lbs)
		Case 2: feed assembly + power supply Shipping dimensions and weight: 62.5 L x 50 W x 29.7 H cm (24.6" x 19.7" x 11.7") <23 kg (<51 lbs)

Product number	
TS3075230	EXPLORER 3075 KA-SAT
TS3075134	EXPLORER 3075 Ku (20W)
407164A-00500	EXPLORER 3075GX

Accessories

Accessories	
407164A-100	EXPLORER 3075 KA-SAT to GX Conversion Kit
TS3075134-100	EXPLORER 3075 to Ku (20W) Conversion Kit

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Subject to change without further notice.