# EXPLORER 6100 Ku

1m Stabilized Auto-Acquire Fly-Away Antenna System for Ku-band Operation

April 2020 Product Sheet


## Online With the Push of a Button

EXPLORER 6100 Ku is a lightweight, rugged and highly portable 1m Auto-Acquire Fly-Away VSAT system. Its user friendly design allows operators with little satellite experience to access ku-band satellite services within minutes. No pointing is needed with EXPLORER 6100 Ku; it automatically finds the satellite in a matter of minutes, providing quick access even in remote locations.

## Uninterupted Communication

The new addition to the EXPLORER portfolio provides you with uninterrupted connectivity services thanks to Cobham's unique Dynamic Pointing Correction technology. In the field, Dynamic Pointing Correction ensures that the antenna stays locked on to the satellite, even in strong wind or if moved. Using lessons learned from Cobham SATCOM's maritime stabilized VSAT antennas, and proven on land with the EXPLORER 8000 Series, the technology sets EXPLORER 6100 apart from other Fly-Away antennas in its class.

## Reliable EXPLORER

EXPLORER 6100 Ku 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 robust design and system versatility ensures high-quality connectivity, which means you can count on EXPLORER 6100 Ku to provide you with vital communication whatever the conditions.

## A True Portable Fly-Away

EXPLORER 6100 Ku is a highly portable Fly-Away VSAT system. It comes in two airline checkable Peli Air cases with custom foam for secure transportation. A rugged and lightweight hard case solution, easy to carry along and quick to deploy. Setting up the terminal takes less than 5 minutes and combined with the fast automated acquisition, the EXPLORER 6100 Ku sets new standards for deploying Fly-Away VSAT systems in the field.

## System Features

- 1m 7-Piece Carbon Fiber Reflector
- Advanced Dynamic Pointing Correction technology
- IP65 rated
- WLAN Access Point and LAN interface
- LCD Display and Web-based User Interface for Easy PC and Smartphone Configuration
- Fast Assembly with Less than 5 Minutes Setup Time
- 2 Case Solution, Airline Checkable
- Replaceable Ku-Band Feed Horn
- Available in 8W BUC, 20W BUC and No Buc Options
- Eutelsat Characterized

eutelsat characterized

DYNAMIC POINTING CORRECTION

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## Antenna Characteristics

| | | |
|---|---|---|
| Feed | | 2 Port Linear (Rx Co- or X-pol) |
| Frequency (GHz) | Rx | 10.7 - 12.75 |
| | Tx | 13.75 - 14.5 |
| Gain (dBi ± 0.2) @ Midband | Rx | 39.9 |
| | Tx | 41.6 |
| Cross Pol Isolation (dB) within 1dB contour | Rx | >30 |
| | Tx | >30 |
| G/T - Comm @ 30° EL, Midband (dB/°K) | | 19.5 |
| EIRP @ Midband (dBW) | | 50.6 / 54.6 |
| Standard BUC options (Watts) | | No BUC / 8 / 20 Watt |

## Environmental

| | | |
|---|---|---|
| Wind Speed | - Operational<br>- Survival | 48 km/h / 30 mph (anchored)<br>118 km/h / 73 mph (anchored) |
| Temperature | - Operational<br>- Survival | -33° to +55°C (-27.4° to +131°F)<br>-40° to +80°C (-40° to +176°F) |
| Water & Dust | IP 65 rated | |
| Humidity | 0 to 100% (condensing) | |

| | |
|---|---|
| Assembly Time | Approximately 5 Minutes |

## Reflector

| | |
|---|---|
| Size | 1.0m |
| Optics | Axis-Symmetric |
| Construction | 7-Piece Segmented Carbon Fiber |

## Mechanical

| | |
|---|---|
| Axis Drive System | 3-Axis Positioner |
| Mount Geometry | Elevation over Azimuth |
| Travel<br>- Azimuth<br>- Elevation | <br>± 95° from stow position<br>0° to 88° |

## Electrical

| | | |
|---|---|---|
| RF on Base Unit | Rx | Female Type TNC (50-Ohm) |
| | Tx | Female Type N (50-Ohm) |
| Max. Power Consumption (excl. BUC) | | 50W |
| Max. BUC Power | Via Coax | 250W / 7A* |
| | Via M&C Connector | 600W / 13A* |
| Power Requirement<br>- Nominal<br>- Absolute max. rating | | <br>24 - 48 VDC<br>19 - 56 VDC |

* Power consumption is limited by the current, i.e. max. BUC power requires max. input voltage of 48VDC

## Weights & Measures (approximate)

| | |
|---|---|
| System weight (assembled) | 28 kg / 61.7 lbs (incl. BUC) |
| Packaging (2 Peli 1637 Air Cases)<br>- Case size (L/W/D) | Airline checkable<br>67.6 / 52.5 / 37.8 cm<br>26.6 / 20.7 / 14.9 inches |
| Weight in transport cases:<br>**Case 1**: Base Unit, 4 reflector panels<br>**Case 2:** RF Package, 3 reflector panels | <br>24 kg / 52.9 lbs<br>18.1 kg / 39.9 lbs (No BUC)<br>20.8 kg / 45.9 lbs (8W)<br>20.5 kg / 45.2 lbs (20W) |

## User Interface

Embedded web server for configuration, control and management using external PC

## Product Numbers

| | |
|---|---|
| 406627A-50014 | EXPLORER 6100 Ku (No BUC) |
| 406627A-50214 | EXPLORER 6100 Ku (8W BUC) |
| 406627A-50314 | EXPLORER 6100 Ku (20W BUC) |

## Accessories

| | |
|---|---|
| 403160P | EXPLORER 6000 Power Supply<br>- 48 VDC, 320 Watt,<br>- Weight: 2.4 kg / 5.3 lbs |
| 403160P-010 | EXPLORER 6000 Power Supply Extension cable<br>- 10m extension cable with Neutrik connectors |
| 406627A-070 | EXPLORER 3100 / 6100 Ku Feed Horn<br>- Field replaceable Feed Horn for Ku-band<br>- Used in EXPLORER 3100 Ku and 6100 Ku |
| 406627A-014 | EXPLORER 6100 Ku Waveguide<br>- 12" Waveguide for EXPLORER 6100 Ku (No BUC) |

## Shipping

EXPLORER 6100 Ku will be available for shipping late March 2020


For further information please contact:

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