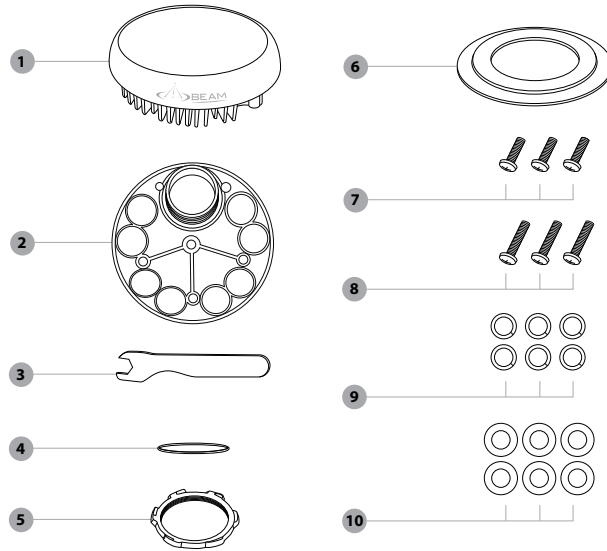


## Transport Bolt Antenna Kit Contents

1. Transport Antenna
2. Bolt Mounting Plate
3. SMA RF Connector Spanner
4. Rubber O-Ring
5. Large Mounting Nut
6. Large Mounting Washer
7. 3 x Small Screws
8. 3 x Large Screws
9. 6 x Small Split Washers
10. 6 x Small Flat Washers



## ANTENNA SPECIFICATIONS

AMPLIFIER + INTEGRAL ANTENNA		CHANNEL SPACING	N/A
EQUIPMENT TYPE	Mobile or Fixed Base Station	OCCUPIED BANDWIDTH (99%)	83.1 KHz
INTEGRATED OPERATING ENVIRONMENT	[ x ] Commercial [ x ] Light Industry & Heavy Industry	MODULATION	TX Modulation: GMSK RX Modulation: OQPSK
POWER SUPPLY REQUIREMENT	DC 12-32 Volts maximum	EMISSION DESIGNATION*	G7W
RF INPUT POWER RATING (US & CANADA)	30.0 dBm or 1.0 Watt peak (conducted)	ANTENNA CONNECTOR TYPE	Integral
RF OUTPUT POWER RATING (US & CANADA)	37.5 dBm or 5.6 Watts peak (conducted)	ANTENNA DESCRIPTION	Manufacturer: Aeroantenna Technology, Inc. Type Drive Model: AT1595-83 Frequency Range: GPS 1565.19– 1585.65 MHz, Inmarsat Receive: 1518-1559 MHz, Inmarsat Transmit: 1626.5-1660.5 MHz GPS Amplifier Gain: 26 dB INMARSAT RECEIVE Amplifier: 26 dB INMARSAT TRANSMIT Amplifier: 11 dB Antenna Element Gain: 6dBi max.
DUTY CYCLE	N/A	AMBIENT TEMPERATURE RATING	-40°C to +70°C
TX OPERATING FREQUENCY RANGE	1626.5 - 1660.5 MHz	STORAGE:	-25°C to +55°C
RX OPERATING FREQUENCY RANGE	1565.19– 1585.65 MHz (GPS) 1518-1559 MHz (Inmarsat 1518-1559 MHz)	OPERATIONAL:	-25°C to +55°C
RF OUTPUT IMPEDANCE	50 Ohms		



### WARNING

All antenna cables used must be compliant with approved dB signal loss. Failure to use Beam approved antenna cables may result in non-compliance, degraded performance and may damage the IsatPhone Pro.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

To Satisfy FCC RF exposure requirements for mobile transmitting devices, a separation distance of 55cm or more should be maintained between the antenna of this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended.

The antenna used for this transmitter must not be co-located in conjunction with any other antenna or transmitter.

PART #: USRMAN006302B

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ISD720  
Transport Bolt Antenna  
(Active)

Installation Guide

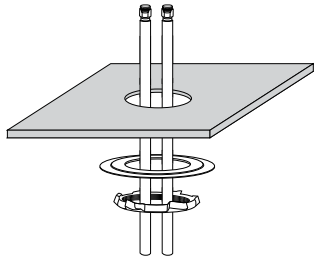


Suitable for IsatDocks

## Transport Bolt Antenna Installation Guide

### Step One:

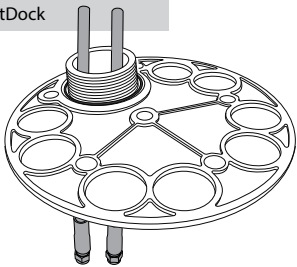
Cut a 42mm hole in the position where the antenna needs to be fitted. Put both "Inmarsat" and "GPS" cables through the hole making sure the nut and washer are on the underside of the hole.



### Step Two:

Put the cables through the hole of the bolt mounting plate as shown below. Make sure that the o-ring is in place at the base of the hole on the bolt mounting plate.

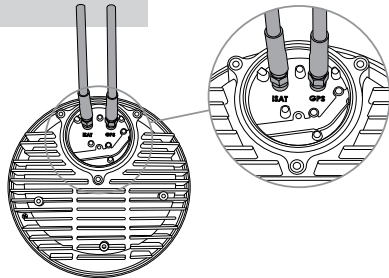
Connects to IsatDock



### Step Three:

Screw the "Inmarsat" cable into the ISAT connector and the "GPS" cable to the GPS connector on the back of the antenna.

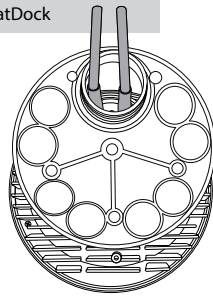
Connects to IsatDock



### Step Four:

Slide the bolt mounting plate down onto the back of the antenna base.

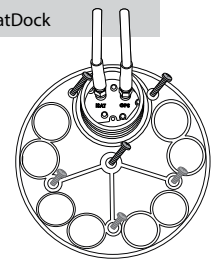
Connects to IsatDock



### Step Five:

Using the three large screws (with a split washer and a flat washer on each) in the upper three holes and the 3 small screws (with a split washer and a flat washer on each) in the lower three holes fix the bolt mounting plate to the back of the antenna.

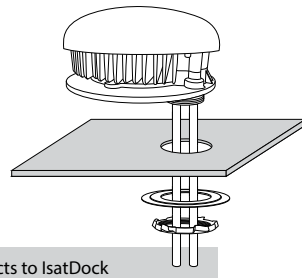
Connects to IsatDock



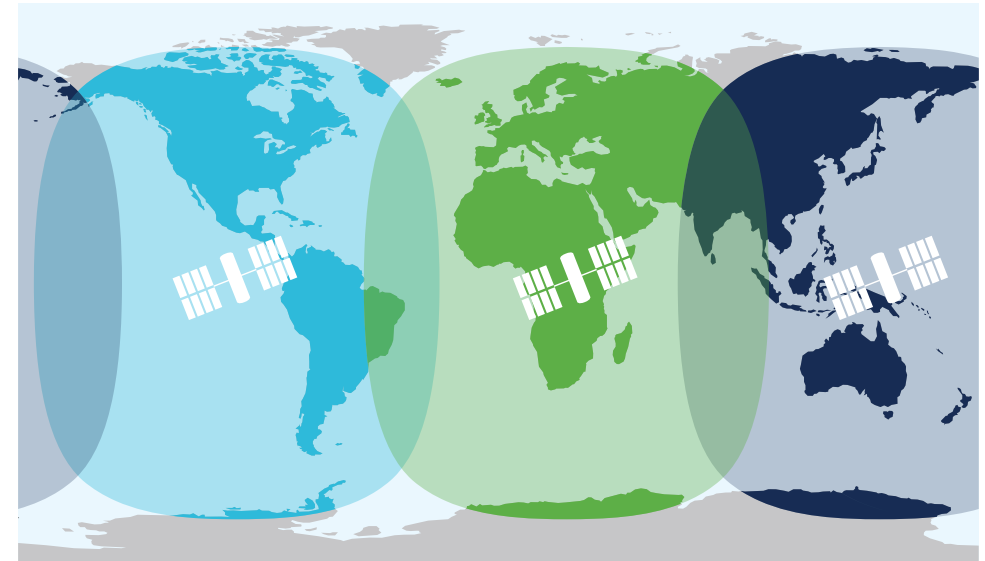
### Step Six:

Set the antenna onto the roof and push the mounting washer up from the underside. Use mounting nut to secure the antenna to the roof and tighten. A silicone sealant may need to be put around the hole to prevent water entering.

Connects to IsatDock



## Antenna Coverage



I-4 Americas

I-4 EMEA

I-4 Asia-Pacific

Sourced from Inmarsat

### Installation Guidelines

To ensure maximum performance of the antenna system and to maximise availability and reliability of service the antenna must:

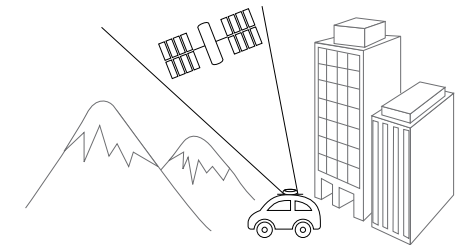
- have a clear line of site to the sky
- be clear and free of obstructions
- be clear of metal objects
- be located away from other transmitting devices
- be securely affixed in location
- not be located indoors
- be installed in conjunction with a certified cable

- Mount all antennas vertically and clear of nearby metal obstructions.
- Minimize horizontal obstructions as much as possible because they can create areas of poor system coverage.

### Installation Options

The antenna system is suitable for marine, vehicle and fixed applications and is designed to meet Inmarsat System performance requirements when installed according to the instructions in this guide.

The following figure shows typical Installations:



The antenna must be installed without obstruction of other instruments or structures. The antenna must not be positioned within range of radar equipment or other RF interference.

### Installing Antenna Cables

When installing antenna cables, follow these guidelines:

- Route and restrain cables to prevent them from vibrating or moving under normal conditions, which could result in damage to the antenna or the coaxial cable connections.
- Where ever the cables contact structures, protect the cables from chafing or abrasion. If a cable needs to be bent, avoid kinking it, and ensure that each bend radius follows the cable supplier limits.
- Use coaxial sealant, shrink-wrap tubing, electrical tape, or another suitable product to seal all cable connections appropriately to prevent moisture and corrosion damage from weather exposure.



### NOTE:

For Satellite & GPS connection instructions please consult your Beam Inmarsat Product manual.



### WARNING

To satisfy FCC RF exposure requirements for mobile transmitting devices, a separation distance of **55 cm** or more should be maintained between the antenna of this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended.