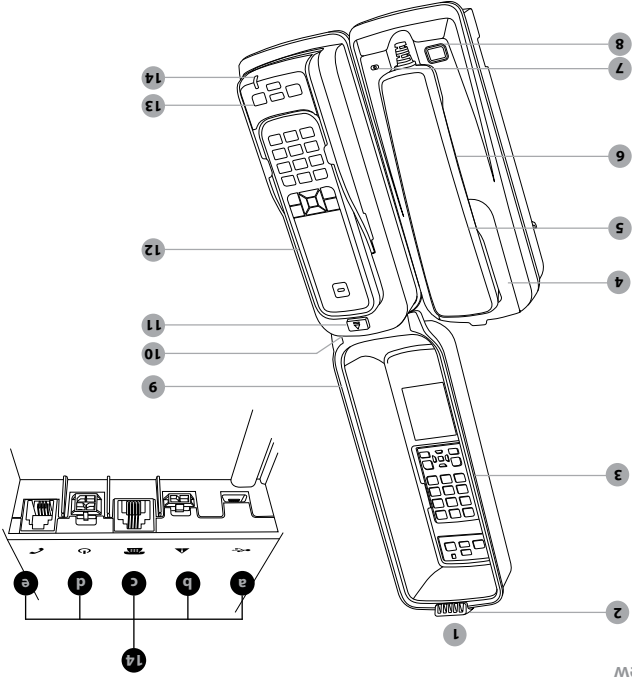




1. IsatDock MARINE Equipment Overview

1. IsatDock MARINE Unit
2. Cover Lock Clasp
3. Marine Cover
4. Mounting Cup (spring or desk/wall cup options)
5. Privacy Handset
6. Speaker (under handset)
7. Microphone
8. Speaker Phone Button
9. Cover Seal
10. Key lock
11. IsatPhone Pro Eject Button
12. IsatPhone Pro (not included)
13. Function Buttons
14. Status Indication LED
15. Back Panel Connectors
 - a. USB Data Interface
 - b. Alert loop connection
 - c. RJ11/POTS interface
 - d. DC power and accessory input



2. Specification Summary

Average Power	Watts	Average
Consumption	Current @ 12V	1.6W
Power w/o IsatPhone Pro	130mA	
Standby + Charging	4.3W	
Transmit + Charging	10.5W	
Sleep Mode	60mW	
Peak Current	42W	3.5 A
Physical Specifications		
Dimensions	270 x 189 x 101 (mm)	10.6 x 7.4 x 4 (inches)
Weight - dock	3.67lbs	1655g
Total Kit Weight	5.99lbs	2715g
Environment Specifications		
Operating Range	-30°C to +70°C	-22°F to +158°F
Storage	-35°C to +85°C	-31°F to +185°F
Battery Charging Temp*	0°C to +45°C	+32°F to 113°F
Humidity	<= 75% RH	
GPS Module (Internal)		
Channels	14 tracking, 51 channel acquiring	
Update Rate	1 Hz	

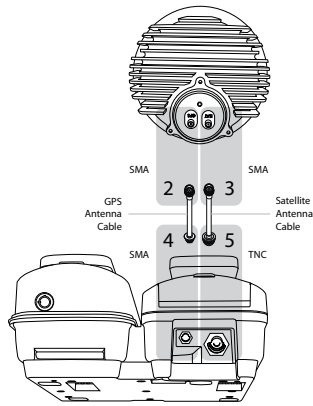
Accuracy	Position 2.5m CEP, Velocity 0.1m/s, Timing 300ns
Acquisition TTF	Cold 30sec, Hot 1sec
Sensitivity	-161 dbm
Operational Limits	Altitude 18000m, Velocity 515m/s
Connectors / Interfaces	
POTS/RJ11	RJ11 1/2-wire, 5REN @ 600m Adjustable dial, ring, busy tone configured frequency and adaptive impedance.
Inmarsat Antenna	TNC-Female
GPS Antenna	SMA-Female
10-32V DC	4-way microfit (AC/DC adaptor, or DC lead)
Privacy Handset Port	RJ9 connector
Configuration/Data	Micro USB
Speaker phone	In-built speaker/microphone

* It is ideal for the ambient temperature to be approximately 18 degrees below the 45°C upper limit for the handset to charge the battery whilst docked.

3. Inmarsat Antenna Connection

To connect the IsatDock MARINE to the GPS inmarsat Antennas, requires the use of certified satellite and GPS antenna cables to be used. These cables are purpose built cables as approved by Beam to manage the power requirements for the antenna system. Approved cables can be found at www.isatdock.com/marine.

1. Refer to the antennas installation guide for antenna mounting and location requirements.
2. Connect the antenna cable labelled "Inmarsat" to the antenna connector labelled "ISAT" via the SMA connector.
3. Connect the antenna cable labelled "GPS" to the antenna connector labelled "GPS" via the SMA connector
4. Connect the GPS-SMA (Female) cable end to the IsatDock's SMA connector
5. Connect the Inmarsat GPS -TNC (Female) antenna cable end to the IsatDock's satellite connector



WARNING

DO NOT pull with force on the cables from the rear of the IsatDock MARINE. Please install strain relief clamping for the antenna cables where required. Correct installation of the antenna system is a vital part of the IsatDock MARINE system, to ensure reliable functionality, and drop-free calls.

WARNING

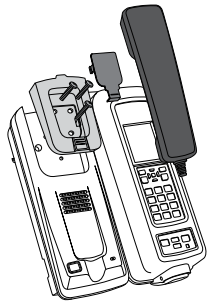
Changes or modifications not expressly approved by Beam Communications could void the user's authority to operate the equipment.

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.

4. Privacy Handset and Mounting Cup

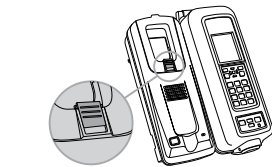
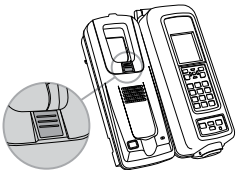
There are two unique mounting cups fit for the privacy handset. (1) springless cup for either a desk mounted cradle position or a wall mounted cradle position. (2) sprung cup for heavy duty use.



(1) Springless Cup

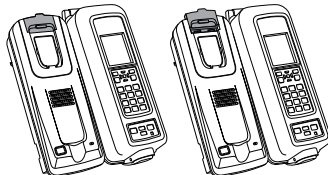
Desk mounted cradle position

The 'springless' cup is fitted to the docking station with the mounting clip in a 'flush' position.



(2) Sprung Cup - Heavy duty use

In harsh environments, the Privacy handset is actively retained in the mounting cup. This is achieved by using the 'spring' mounting cup. To remove the handset from the cup, the phone is lifted up against the pressure of the spring until it clears the lower mounting pip and can be removed from the docking station.

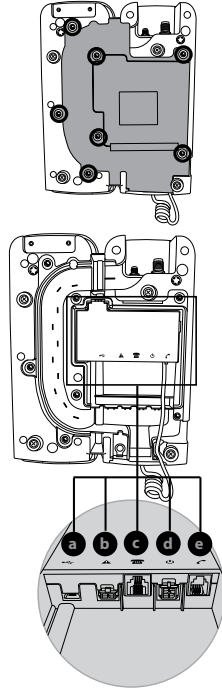


Wall mounted cradle position

The mounting clip can be slid out and reversed, producing a protruding point that the Privacy handset rests upon. For a wall mounted docking station this retains the privacy handset and the 'spring less' cup has enough height to allow the handset to rise up off the clip and out of the mounting cup. This option would be best suited for stable conditions

5. Access to rear connector bay

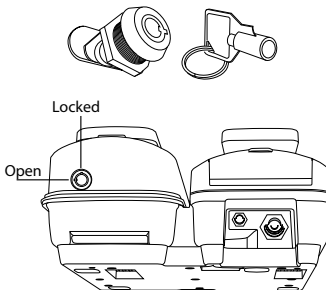
For the IsatDock MARINE, the external cable interfaces are at the rear of the docking station. The cover panel creates the IP rating for the electrical interface and retains the cables in their respective channels. The cover panel is fixed in place by 7 screws.



- a. USB Data Interface
- b. Alert loop connection
- c. RJ11/POTS interface
- d. DC power and accessory input
- e. RJ9 Privacy handset

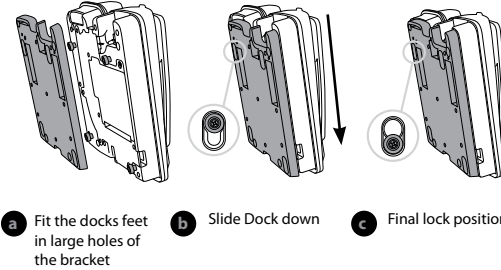
8. IsatPhone Key Lock

A barrel type lock is situated in the top of the dock. When locked, the eject button cannot be depressed and the IsatPhone Pro. Once locked, the access to the security bolt beneath the handset is also denied thus ensuring the MARINE docking station cannot be removed from their mounting bracket.



6. Mounting Orientation

There are four keyhole shaped slots in the mounting bracket that mate with feet on the rear of the plastics. To attach the bracket, the larger end of the keyhole will pass over the feet. The bracket is then slid up to lock the feet into the narrow section of the keyhole.



The IsatDock MARINE can be mounted either flat on a desk or vertically to a wall. When wall mounting the docking station, the wall bracket is first screwed to the wall and the dock is slid into place. Two security pins are then slid into place locking the dock to the wall.

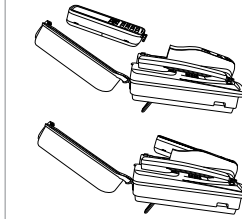
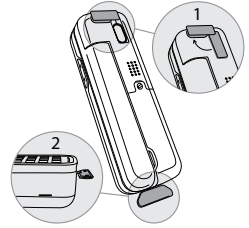
The docking station can be elevated in the desk mounted orientation by two retractable feet included in the mounting bracket.



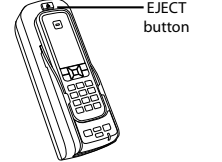
7. Docking and Un-docking your IsatPhone Pro

To place the IsatPro Phone into the docking unit, both the 'covers' on the external antenna connectors and the USB/Audio connectors need to be opened.

1. The antenna 'cover' must be placed at 90 degrees to the antenna connector cavity and run parallel to the top edge of the phone.
2. The 'cover' in the base of the phone should be in the 90 degree opened position.



4. To remove the handset from the cradle, press the EJECT button at the top of the docking station. The dock will swing out and the handset can be removed.



3. To dock the handset, align the IsatPhone Pro with the phone tray and slide the handset down until it seats flush to the bottom of the tray. Swing the phone down into the cradle by applying pressure to the top of the handset. An audible 'click' is heard when the phone is in the docked position.

9. IsatDock MARINE Front Panel

Location	Button Mode	Action	LED/Sound
	Mute Press on/off	In a Call: Mute the microphone (uplink) on the privacy handset if connected to cradle.	LED turns RED - Muted LED turns OFF - Not muted LED flashing Yellow - RJ11/POTS in use
	Up/Down OR	In a Call: Increase/decrease volume on the internal speaker or privacy handset if connected to cradle. Out of Call: Increase/decrease volume of incoming ring tone on the internal speaker phone.	Audio will sound louder/quieter in privacy handset with each press. A beep will sound indicating the increased/decreased ring tone volume.
	Single Press (1 second)	In Tracking Mode*: Send a tracking message to the pre-configured destination	A beep will sound to indicate that a tracking message is to be sent*
	Single Press (7 seconds)	In Alert/Emergency Mode*: Clear the alert/emergency mode and return to the Tracking mode*.	LED changes from RED (solid or flashing) to GREEN*
	Two button press (2 seconds)	In Alert Mode*: Activate the Alert/Emergency mode.	A beep will sound indicating alert/emergency mode is activated* LED changes from GREEN to solid RED. LED will change to flashing RED once the remote server has acknowledged receiving the alert.
	Brightness dual button simultaneous press	Out of Call: Enter LED brightness change mode. Press UP and DOWN arrows to vary intensity. Mode will automatically exit after 5 seconds after the last button press.	All LED's will change to WHITE and a single beep will sound when entering brightness change mode. A short double beep will sound when exiting change mode.
	Speakerphone press ON/OFF	In a Call: Terminate call if speaker phone mode is active Activate speakerphone mode if Privacy Handset mode is active. Out of Call: Answer inbound call in speakerphone mode	LED turns GREEN - Speakerphone mode active LED turns OFF - Speakerphone mode not active

* This action is optional, only when the Tracking Mode for your IsatDock MARINE is configured and activated.

* A beep will only sound if audible alerts are enabled in the IDMS