





### **Thuraya Atlas IP** The new wave in satellite broadband connectivity at sea





### Thuraya Atlas IP+

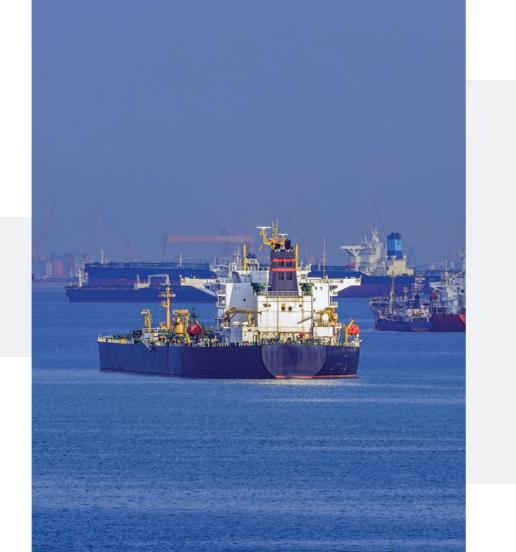


Every day, more and more vessels traverse the oceans to facilitate global trade, protect and monitor international waters, conduct aquatic research or simply to explore the seas at leisure. These growing marine activities are dependent on furthered connectivity across seas, ports and land - the need for superior communication channels and data exchange systems in the maritime sector has never been higher.

Thuraya understands this need and is equipped to meet it in the right way. For over 20 years, we've been a reliable satellite communications partner to all kinds of maritime operators and shipping lines, and continue to be the preferred solutions provider for their at-sea connectivity requirements.

With its latest terminal, the Atlas IP+, Thuraya continues to bolster the maritime data market with relevant technical advances, top-notch hardware components, and competitive airtime pricing.

### Product Overview





Thuraya Atlas IP+ is a maritime broadband terminal that delivers enhanced connectivity, greater flexibility, and improved operational efficiency to those seeking added value on board vessels at sea. It provides merchant maritime, fishing, government and leisure users with a purpose-designed, full-featured device that supports voice and broadband IP data connectivity at speeds of up to 444kbps.

Thuraya Atlas IP+ is a compact device with direct bulkhead mounting, built-in WiFi and a single cable connection to the stabilized antenna. The terminal improves power efficiency, and has a built-in firewall with increased capabilities for security and control, a smaller form factor, and greater versatility than rival maritime broadband products.

Atlas IP+ also includes a range of features designed to support improved communications and onboard ship operations such as port forwarding, an English/Chinese web interface, and continuous GPS output.



# Product Features and Benefits

#### Optimal data speeds

Offers the best data speeds for an L-band maritime terminal of its size, enabling even smaller ships to have broadband connectivity while maximizing their above and below deck space usage.

#### Flexible voice calls

Through its RJ11 port, the terminal's BDU can be connected to any standard analog phone - including cordless models. This allows for simultaneous voice and data sessions. The voice calls run via the Thuraya Talk VoIP app, lending a cost-effective service option.

#### Enhanced firewall capabilities

The built-in firewall in Atlas IP+ is easy to set up and goes beyond lending security to broadband communications by enabling ship owners or captains to control data traffic. The firewall allows load-intensive pages, such as video streaming or conferencing sites, as well as other undesirable domains to be blocked, ensuring that the available bandwidth is used efficiently and cost-effectively.

#### Tracking and reporting

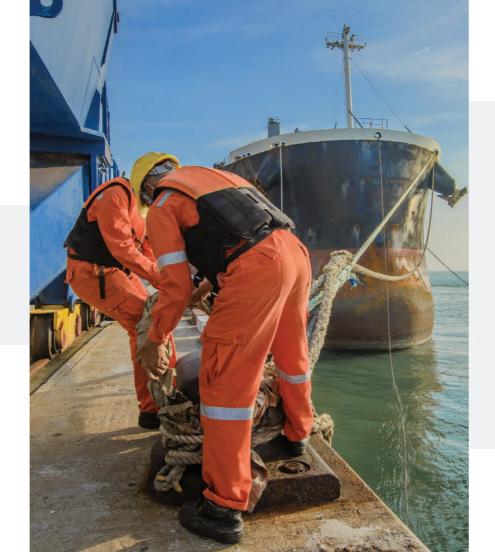
The terminal comes with SMS tracking, position reporting and geo-fencing features, which can be integrated into a fleet management system to track the real-time location of vessels. Geo-fencing further allows automatic alerts to be sent to at-shore crew, who can then prepare for the arrival of an approaching vessel. This function can be set to send IP- or SMS based alerts for entering or leaving predetermined zones. Tracking is set by time duration between alerts or by distance moved by vessel.

#### Easy vessel integration and management

With four RJ45 LAN ports (and 1 with PoE), Atlas IP+ is easy to integrate into any ship's network. Each port can be MAC address locked, which fortifies the system security. Additional terminal features facilitate improved vessel management. These include:

- Port forwarding: Automatically transfers data from shipboard equipment and devices in support of M2M reporting routines.
- WiFi antenna: The built-in WiFi 802.11b/g supports many crew welfare applications by enabling smart devices like phones or tablets with fast internet access. The WiFi can hide the SSID and also has WEP, WPA/WPA2 password protection.
- Alert button: The unit has an alert button that, when pushed, sends out a predefined message with the vessel coordinates via SMS or IP. These messages can be sent to three SMS or IP addresses each. Messages are re-sent at a user set frequency until the maximum number of tries is reached or they are manually stopped via the web interface.
- Circuit switch voice: Atlas IP+ can be easily switched between data or circuit-switched voice via the optional handset or web interface, giving redundancy for voice communication to the standard VoIP solution. White and black lists can be set up to control outgoing calls, enabling the owner or captain to control costs on calls made from the terminal.

### Solutions





Atlas IP+ delivers nuanced solutions to the maritime sector by catering to its evolving needs and facilitating its advancing operational capabilities with ease. An upgrade in Thuraya's high-performing marine data portfolio, this new terminal provides a full range of device-centric functionalities, but with value-added specifications for superior performance at the lowest market costs.

In addition to its own suite of features, Atlas IP+ seamlessly integrates with partner solutions to provide enhanced services that improve visibility, drive efficiency and boost crew welfare. Typical solutions include Voice over IP (VoIP), internet optimization, remote IT support, database replication, video conferencing and instant



### Network and Pricing

Thuraya Atlas IP+ is available through many attractive maritime-centric pricing packages, ensuring flexibility and choice for exceptional value. Our postpaid plans allow users to choose from high volume, low usage or VSAT backup options to suit their individual requirements.

Thuraya airtime remains the best-priced in the maritime market, enabling users to enjoy fast and simple connections alongside value-added services, across our footprint.

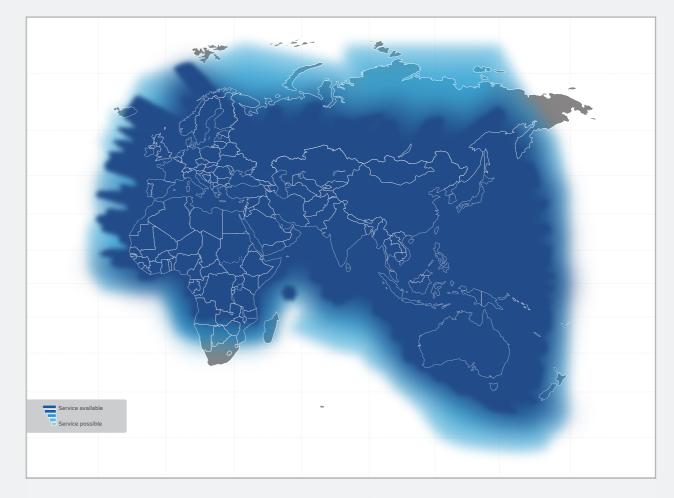
Our powerful L-band satellite network can dynamically assign capacity where and when it is needed, providing a service that covers approximately 60 percent of the world's busiest ports and shipping lanes.

## Thuraya's Coverage Area

Thuraya Atlas IP+ enables you to communicate via satellite across Thuraya's extensive footprint, including 161 countries in Asia, Australia, Africa and Europe.

It provides the advantage of reliable and flexible at-sea communications wherever your mission or business operations take you - even in the most challenging ocean environments and remote locations.

No matter where you are, Thuraya Atlas IP+ keeps you connected.



### Technical Specifications

Atlas Specification	
Standard IP down/up (kbps)	444/404
Streaming IP up/down	16kbps, 32kbps, 64kbps, 128kbps,
	256kbps or 384kbps (Asymmetric)
Simultaneous voice and data via built-in VoIP ATA	Yes
Circuit Switch Voice (Optional handset)	Yes
SMS	Max 160 characters
3 axis stabilized	Yes
Weight [deck mounting] (kg)	3.1
Height [deck mounting] (mm)	277
Diameter (mm)	319.5
G/T (dB/K)	-18.0
ERIP (dBW) average	15.0 to 17.8
Maximum BDU to ADU Cable length (m)	50m Max 25m std
Tx signal output level Min/Max (mV)	250/500
Voltage (V)	38 - 45
Current (A)	1.05
Power max/min (W)	40/20
Frequency (Hz)	DC
RJ 45 LAN port	4
GPIO port	12 pin
RS 232 serial port	1 for GPS O/P & Debug
SIM card holder	Yes
Primary analog phone port (RJ11)	Yes
Secondary circuit switched handset port (RJ45)	Yes

DC power connector		Yes
Ambient temperature (°C)	BDU	Storage -40°C to +80°C
		Operational -25°C to +55°C
	ADU	-30 to 55
Vibration		Operational
	BDU	Random vibration of 1.05g rms in
		each of three mutually perpendicular axes
	ADU	5 to 20 Hz: 0.02g2/Hz 20 to
		150 Hz: -3dB/octave
Relative humidity	ADU	Up to 95% at 40°C
Electromagnetic emissions		IEC 60945, EN 301 489-1, EN 301 489-20
Electromagnetic immunity		EN 60950
RoHS		Yes
IEC 60945		Yes
CE		Yes
FCC		Yes
SMS		Yes
Circuit-switched voice		Yes
Distress alert		Yes
Firewall		Yes
Port forwarding		Yes
PS connection		Yes
Backup/restore of configura	ation settings	Yes
Restricted dialing		Yes
Geo-fencing		Yes
WiFi		Yes
Built-in GPS		Yes
Position reporting		Yes

### Why Thuraya for Maritime

Thuraya provides all at-sea customers with robust maritime communications over a reliable satellite network for the best-value price plans available in the market. Our products are made by high quality manufacturers, save you space on board, and are easy to install.

The Atlas IP+ lends today's fast-paced maritime sector with optimum connectivity and provides a single-solution shipboard communications hub to save time and enhance cost-efficiency across oceans and ports.

Our commitment to our customers is simple: in endless seas, we're there with you.