



THURAYA ORION NEO

High-Performance Maritime Satellite Broadband

Product Overview

Orion NEO is a compact, high-performance maritime satellite terminal designed to deliver dependable L-band broadband connectivity for vessels operating across blue-water and coastal routes. Powered by the Thuraya-4 next-generation satellite network, it provides secure IP data and voice services without reliance on coastal cellular coverage. Housed in a rugged, weather-sealed dome, Orion NEO maintains stable connectivity in rough seas and harsh maritime climates, supporting crew welfare, ship-to-shore operations, and mission-critical vessel communications.

Built for Maritime Operations

Engineered specifically for maritime environments, Orion NEO is designed to operate reliably under heavy sea conditions and vessel motion. Its solid-state, low-profile design ensures stable links during ship roll, while IP68 ruggedisation protects against salt spray, rain, humidity, and extreme temperatures.

With consistent L-band performance and maritime-ready durability, Orion NEO enables uninterrupted connectivity across long voyages and demanding operational conditions.

Always Connected at Sea

From fleet operations and navigation data to crew communications and remote diagnostics, Orion NEO delivers an integrated communications platform for modern vessels. Embedded voice services and onboard networking simplify installation and reduce system complexity, enabling vessels to stay connected, compliant, and operational at all times. Powered by Thuraya-4, Orion NEO provides dependable ship-to-shore connectivity across Europe, the Middle East, Africa, and Central Asia.

Product Features



Maritime-Optimised L-Band Broadband

Delivers secure voice and IP data connectivity across blue-water and coastal routes.



Stable Connectivity in Heavy Seas

Maintains link performance during vessel motion and ship roll.



Compact, Weather-Sealed Dome

Low-profile IP68 design built to withstand harsh maritime environments.



Integrated Voice & Data Services

Embedded SIP/VoIP and routing reduce the need for additional onboard equipment.



Flexible Power & Networking

Supports DC and PoE power with integrated Ethernet and Wi-Fi access.



Multi-GNSS Support

Enables accurate positioning for maritime operations and situational awareness.



Product Specifications

Dimensions	Antenna height: 9.7 mm Antenna width: Ø 32.1 mm
Weight	4.8 kg
Data Capabilities	> 50° elevation: Tx: Up to 1024 kbps (no ship roll) Rx: Up to 1024 kbps (30° ship roll)
	> 20° elevation: Tx: Up to 1024 kbps (no ship roll) Rx: Up to 600 kbps (30° ship roll)
	> 10° elevation: Tx/Rx: Up to 600 kbps (no ship roll)
Voice	<ul style="list-style-type: none"> • Standard VoIP • Embedded SIP Server • PTT with Mobile Gateway Neo
Frequency Range	Tx: 1626.5 - 1660.5 and 1668 - 1675 (MHz) Rx: 1518.0 - 1559.0 (MHz)
GNSS:	GPS, Galileo, Beidou, Glonassr
Languages	EN, AR, FR, DE, ES, RU, JP, CN
Approvals	CE, RED, RoHS, WEEE, FCC, UL, RCM Thuraya Type Approval
Environmental Conditions	Temperature Operational (ambient): -25°C to +55°C Storage: -40°C to +85°C
	Water and dust: IP68
	Relative humidity MIL-STD-810G, Test method 507.6
	EMI/EMC EN 01-301489, EN 17-301489, EN 19-301489

Power	DC input range: 12 - 24 VDC (Max. 10.8 to 32 VDC)
	Power (max): 70W (@10.5 - 32V)
Interfaces	WLAN Access Point: 802.11 b/g/n/ac
	Ethernet: 10 / 100 / 1000 Mbps
	Combined DC power and Ethernet connector Combined connector providing DC power input, ignition and Ethernet (PoE 802.3bt Type 3) connectivity.
	User interface One LED (Status), Web Interface, Reset Button, SIM card connector
Other features	Space42 Connect App Turns a Smartphone into a Satphone. Available for Android / IOS.
	Set-up and Router Functionality Webserver, NAT Router, Admin control (password protected), DHCP, Network Management, Remote Management, PPPoE
Package	<ul style="list-style-type: none"> • Thuraya Voyager NEO Terminal with 3 cm spacers • Quick Start Guide • 6m hybrid DC power and Ethernet cable (open-ended)
Accessories	<ul style="list-style-type: none"> • 403723B-009: Magnetic Mount kit • 403706B-050: Connection Box • 408030A-931: Hybrid DC / Ethernet cable, 6m open-ended • 408030A-941: PoE connection cable (Cat6A), 6m open-ended • 408030A-945: PoE connection cable (Cat6A), 25m open-ended • 408030A-948: PoE connection cable (Cat6A), 50m open-ended