

Orion NEO

High-Performance Maritime Satellite Communications Solution

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Connecting the future

Product Sheet



Setting new maritime standards

Orion NEO is a compact maritime solution for voice and data communication. The one-piece system consists of a combined transceiver with integrated wifi and a switched-beam antenna with no moving parts.

With Orion NEO you have fast connectivity between your vessel and shore, regardless of location or conditions. You can ensure smooth running of your business and increase crew welfare by providing easy to manage internet access and voice calling.

Groundbreaking speeds

With speeds above 1 mbps on the Thuraya 4-NGS satellite from Space42 the Orion NEO provides the fastest on-the-move broadband IP speeds for a satellite broadband antenna of its size — ready for connection in any location covered under Thuraya's satellite network.

Broadband satellite connectivity made simple

Orion NEO is easy to install, so getting connected aboard a single vessel or an entire fleet is straightforward and cost-effective. The system is delivered with everything you need to get started in the box and because it is based on standard IP services and features a clear user interface, connecting your computer, corporate network or phone system is simple and secure.



Mast mounted Orion NEO Maritime Antenna

No moving parts

The beam-switching Orion NEO is a compact and lightweight antenna (just 4.8 kg), ideal for smaller vessels. Having no moving parts the antenna is designed for robust and durable use in maritime environments.

The antenna is intended for coastal and regional use in areas where the satellite elevation angle is above 30°.

System features

- Always available high quality internet and voice communication
- Type Approved for the Thuraya L-Band network
- Versatile power options with both Power over Ethernet (PoE) and 12 - 24 VDC input
- Simple to set up and operate
- Durable waterproof IP-68 rated design with durable screw connectors
- AES-256 encryption
- Supports Space42 eSIM and USIM

Specifications

Dimensions:

Antenna height:	9.7 cm
Antenna width:	Ø32.1 cm

Weight:	4.8 kg
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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:	Standard VoIP, Embedded SIP Server
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Ship motion

- 30° ship roll	Works above 20° elevation
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Satellite Frequency Range:

Rx	1518.0 - 1559.0 MHz
Tx	1626.5 - 1660.5 MHz, 1668.0 - 1675.0 MHz

EIRP:	14.1 dBW [+3.0 dB / -4.0 dB]
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Isotropic gain	10.5 dBi
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GNSS:	GPS, Galileo, Beidou, Glonass
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Languages:	ENG, AR, FR, POR, ES, RU, JP, CN
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Approvals:	CE, RED, RoHS, WEEE, FCC, UL, RCM Thuraya Type Approval
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Environmental conditions

Temperature

Operational (ambient):	-25 to +55°C
Storage:	-40°C to +85°C

Relative humidity:	MIL-STD-810G, Test method 507.6
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EMI/EMC:	EN 301489-01, EN 301489-17, EN 301489-19
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Water and dust:	IP68
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Power

DC input range:	12 - 24 VDC (Max. 10.8 to 32 VDC)
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Power (max):	70W (@10.5 - 32V)
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Interfaces

WLAN Access Point:	802.11 b/g/n/ac
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Ethernet:	10 / 100 / 1000 mbps
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Combined DC power and Ethernet connector:

Combined connector providing DC power input, ignition and Ethernet (PoE 802.3bt Type 3) connectivity. Hybrid cable wiring: Power 2, Ignition 1, Ethernet 4 + 1 (shield)

User interface:	One LED (Status), Web Interface, Reset Button, SIM card connector
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Other features

Thuraya Connect App (Available for Android / IOS):

Control your Orion NEO with your Smartphone.

Mobile Gateway:

Ruggedized satellite router with advanced PTT and VoIP capabilities

Package

- Orion NEO Maritime Antenna
- Mast Mount Bracket
- Quick Start Guide
- 6m hybrid DC power and Ethernet cable (open ended)

Accessories

- 408030A-009: Magnetic Mount Kit for NEO terminals
- 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
- 408050A-42000: Mobile Gateway NEO C
- 408052A-42000: Mobile Gateway NEO M
- 408030A-935 :Hybrid DC/Ethernet connection cable, 25m open ended

Orion NEO Antenna Dimensions



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