mP85NX

85 CM mPOWER Ka-BAND
Maritime Terminal

FEATURES

MPOWER KA-BAND MARITIME TERMINALS

The mP85NX is the maritime user terminal which is able to utilize the mPOWER Medium Earth Orbit (MEO) satellite constellation. The mP85NX operates in 2.5 GHz full commercial Ka-band range and has GEO but also MEO and LEO constellations tracking capability. The mP85NX ensures seamless and undisrupted connectivity during NGSO satellite handovers with proven tracking algorithm.

SEAMLESS, UNDISRUPTED CONNECTIVITY

The mP85NX shall be operated in dual dome for consistent connection with MEO satellite handovers. The 2nd antenna connection to the rising satellite is established before the 1st antenna connection to the falling satellite is broken in dual antenna configuration. Also this kind of configuration is using as redundancy solution against an possible blockages on board of a vessel.

FIBER-EQUIVALENT PERFORMANCE

The high-precise feeder and reflector which supports 2.5 GHz wide Ka-band enables flexible bandwidth allocation and the integrated 20W Transceiver to the mP85NX has a equivalent output performance to a 40W BUC. Intellian's cutting-edge technology delivers best-in-class performance for an unparalleled user experience.

O3B MPOWER CONSTELLATION

O3b mPOWER is SES's next-generation MEO constellation which is designed for demanding application with mobility, telecom, government and enterprise customers. This service is capable to deliver thousands of uncontended managed services from hundreds of Mbps up to multiple Gbps per service.

FUTURE-PROOF SOLUTION

Intellian provides "Future-proof" solution. If the users had the Intellian v85NX deployed on a vessel or purchase the v85NX for conventional satellite communication services, those of v85NX are able to be converted to mPOWER terminal through the modularized conversion kit sold separately. Typical VSAT terminal can be changed to up-to-date mPOWER terminal easily.

mP85NX

TECHNICAL SPECIFICATIONS

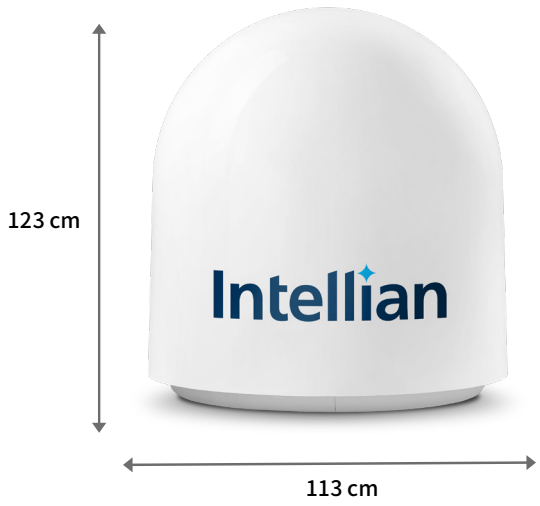
ABOVE DECK UNIT

Radome Height		123 cm / 48.4”
Radome Diameter		113cm / 44.5”
Reflector Diameter		85 cm / 33.5”
ADU Weight		96 kg / 211.6 lbs
Azimuth Range		Unlimited
Elevation Range		-20° to +115°
Cross-level Range		Up to ±37°
Tx Frequency		27.5 ~ 30.0 GHz
Tx Gain		45.9 dBi (w/o radome)
Rx Frequency		17.7 ~ 20.2 GHz
Rx Gain		42.7 dBi (w/o radome)
EIRP		57.8 dBW (Ka-band 20W)
G/T		18.3 dB/K (@19.7 GHz, EL 10 degrees)
Polarization		Circular (LHCP, RHCP)
Stabilization Accuracy		0.2°max in presence of specified ship motions
Ship Motion	Roll	± 20° at 6 second
	Pitch	± 15° at 6 second
	Yaw	± 8° at 6 second
	Turning rate	Up to 12° /sec & 5°/sec2

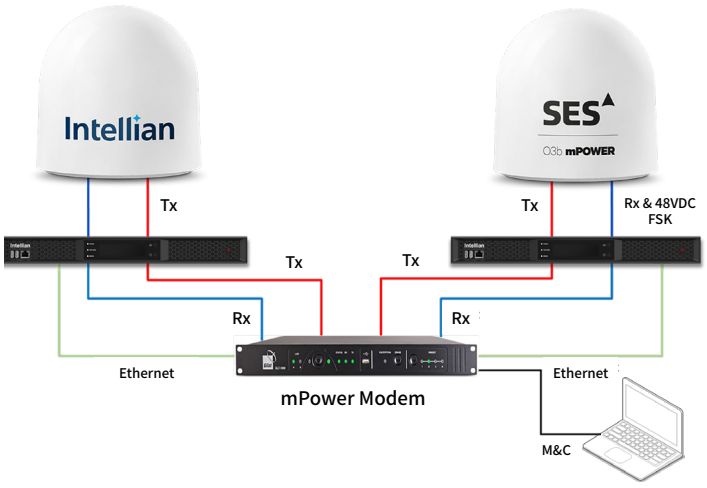
BELOW DECK UNIT

Dimensions	43.1 x 35.0 x 4.4 cm / 17.0” x 13.8” x 1.7”
Weight	5.2 kg / 11.5 lbs
Gyrocompass Interface	NMEA2000 / NMEA0183
Modem Interface	Ethernet port / RS-232C / I/O Console
Ethernet Port	RJ45, TCP/ IP connection
Serial Interface	RS-232C (58600bps 8, N, 1)
RF Interface	ACU to Antenna : N-type x 2EA ACU to Modem : SMA x 2EA
USB Port	1 PC Connection & Firmware Upgrade (front) 1 Logs Download (front) 1 Wi-Fi (rear, for Wi-Fi dongle)

SYSTEM DIMENSION



SYSTEM DIAGRAM



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