

Intellian OW50M-Rac / OW70M-Rac



ONEWEB MARITIME 9 DB/K - 12 DB/K

Dual Parabolic User Terminal

OneWeb Maritime User Terminal

OW50M & OW70M are the first maritime user terminals that are able to utilize OneWeb's Low Earth Orbit (LEO) satellite constellation. They provide assured tracking capability even in the harshest of sea conditions, effectively meeting the needs of customers across all maritime sectors with the highest performance and data throughput demands.

Quick and Easy Deployment

The antenna comes pre-assembled and has a single cable connection delivering both power and data between the indoor antenna control unit and the outdoor antenna. This significantly reduces installation time, complexity and cost.

Low Temperature Performance

Utilizing the latest heating device technology, OW50M & OW70M provides dependable performance in extremely low temperatures (-40 degrees Celsius). With OneWeb being the only LEO constellation committing to 100% coverage of the poles, you can be assured of optimal connectivity for vessels travelling in both polar regions.

Seamless Connectivity

The OW50M or OW70M is comprised of two antennas which operate in Primary-Primary mode. The terminal's 3 axis stabilization platform allows seamless and undisrupted connectivity, which is essential for smooth reliable handovers. Each antenna works individually which provides increased flexibility for blockage mitigation so integrity of the high speed data transfer and low latency remain optimized.

Fibre-Like Connectivity at Sea

With an optimized G/T of 9.3dB/K and 53cm reflector, the OW50M is able to deliver unparalleled high speed, low latency connectivity. Combined with optimized EIRP, the terminal can achieve significant return throughput performance.

With an optimized G/T of 12.2dB/K and 73cm reflector, the OW70M is able to deliver unparalleled high speed, low latency connectivity. By utilizing the "Dual Carrier" feature combined with optimized EIRP, the terminal can achieve even greater return throughput.

Technical Specification

Above Deck Unit:

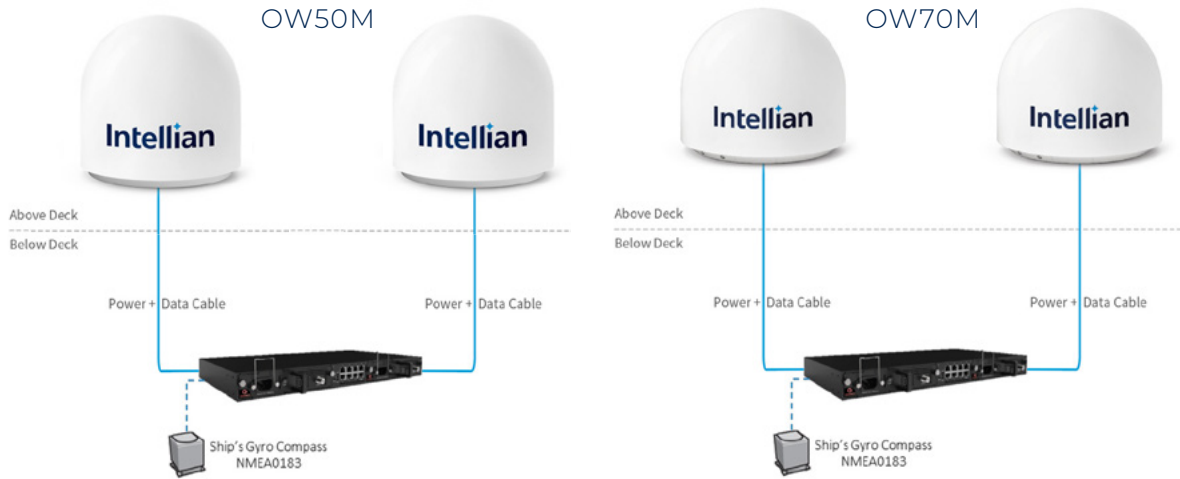
	OW50M	OW70M
Radome Height	85 cm / 33.5"	96.8 cm / 38.1"
Radome Diameter	85.6 cm / 33.7"	110.2 cm / 43.4"
Reflector Diameter	53.0 cm / 20.9"	73 cm / 28.7"
Azimuth Range	Unlimited	Unlimited
Elevation Range	-80° to 80°	-80° to 80°
Cross-level Range	± 10°	± 10°
Tx Frequency	14.0 ~ 14.5 GHz	14.0 ~ 14.5 GHz
Tx Gain	34.9 dBi	37.8 dBi
Rx Frequency	10.7 ~ 12.7 GHz	10.7 ~ 12.7 GHz
Rx Gain	33.4 dBi	36.5 dBi
EIRP	33.6 dBW/20 MHz (Single Carrier)	33.6 dBW/20 MHz (Single Carrier) 36.6 dBW/40 MHz (Dual Carrier)
G/T	9.3 dB/K (@11.8 GHz)	12.2 dB/K (@11.8 GHz)
Polarization	Circular (Tx: LHCP, Rx: RHCP)	Circular (Tx: LHCP, Rx: RHCP)

Below Deck Unit:

	OW50M	OW70M
Dimensions	(WxDxH) 44.2 cm x 25.0 cm x 4.4 cm /17.4" x 9.8" x 1.7"	(WxDxH) 44.2 cm x 25.0 cm x 4.4 cm /17.4" x 9.8" x 1.7"
Weight	5.1 kg / 11.2 lbs	5.1 kg / 11.2 lbs
Interface	2x RG6/RG11 MoCA Port (F-type) 8x Ethernet Port (RJ45) 1x USB (type-A) 1x NMEA-0183 Port (2-pin terminal)	2x RG6/RG11 MoCA Port (F-type) 8x Ethernet Port (RJ45) 1x USB (type-A) 1x NMEA-0183 Port (2-pin terminal)
Power Requirement	AC 100V ~ 240V/50Hz ~ 60Hz	AC 100V ~ 240V/50Hz ~ 60Hz
DC output range	2x DC 56V +/-5% (2x 250W)	2x DC 56V +/-5% (2x 250W)



System Diagram



System Diagram (Heating module installed Condition)

