# Intellian

# **GX150NX** The World's First 1.5m GX Terminal



## 2.5 GHz Wideband Ka-band Ready

Ka-band becomes the next choice for new satellite capacity as the demand for bandwidth increases. The GX150NX has a full range-optimized reflector and radome supporting high-speed for Ka-band services.

#### Single Cable Solution and Fiber Link Support

A single cable carries TX, RX, DC power, data, and reference signals between the antenna and the BDT. In addition, a Fiber optic solution is provided, resulting in minimal signal loss regardless of cable length. These provide a more efficient cost-effective solution.

## **I** Supporting Higher Throughput

The increased BUC output power to 10 W supports greater through -put in response to customer requests to push even more traffic on the network.

## All-In-One Below Deck Terminal

The all-new GX BDT integrates ACU, GX modem, Power supply, 4-port switch, and GX mediator. This 19" 1U size BDT is easy to install in the rack, reducing installation time and costs.

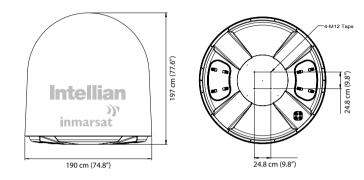
# GX150NX The World's First 1.5m GX Terminal

# I Technical Specifications

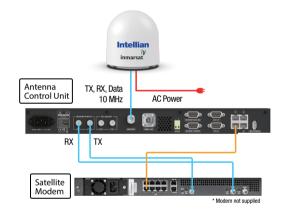
#### Above Deck Unit

Radome Height197.0 cm / 77.6"Radome Diameter190.0 cm / 74.8"Reflector Diameter150.0 cm / 59.0"Weight260 kgPlatform3-axis / Azimuth, Elevation, Cross-levelAzimuth RangeUnlimitedElevation Range15° to +110°Cross-level RangeUp to ± 35°Stabilization Accuracy0.2° peak mis-pointing @ max ship motion conditionMotor Brake SystemDynamic Motor BrakeTx Frequency29.0 ~ 30.0 GHz Ku-bandRx Gain47.7 dBi @ 19.7 GHz (wo/ radome)G/T>22.8 dB/K @ 19.7 GHz (w/ radome)BUC Power10 WTx SidelobeMeets FCC 25.138Rx SidelobeMeets FCC 25.209PolarizationSingle 50 ohm Coax Cable		
Reflector Diameter150.0 cm / 59.0"Weight260 kgPlatform3-axis / Azimuth, Elevation, Cross-levelAzimuth RangeUnlimitedElevation Range-15°to +110°Cross-level RangeUp to ± 35°Stabilization Accuracy0.2° peak mis-pointing @ max ship motion conditionMotor Brake SystemDynamic Motor BrakeTx Frequency29.0 ~ 30.0 GHz Ku-bandTx Gain50.9 dBi @ 29.5 GHz (wo/ radome)Rx Gain47.7 dBi @ 19.7 GHz (wo/ radome)G/T> 22.8 dB/K @ 19.7 GHz (w/ radome)BUC Power10 WTx SidelobeMeets FCC 25.138Rx SidelobeCircular (Tx : RHCP, Rx : LHCP)	Radome Height	197.0 cm / 77.6"
Noncent of an anotherWeight260 kgPlatform3-axis / Azimuth, Elevation, Cross-levelAzimuth RangeUnlimitedElevation Range-15°to +110°Cross-level RangeUp to ± 35°Stabilization Accuracy0.2° peak mis-pointing @ max ship motion conditionMotor Brake SystemDynamic Motor BrakeTx Frequency29.0 ~ 30.0 GHz Ku-bandTx Gain50.9 dBi @ 29.5 GHz (wo/ radome)Rx Frequency19.2 ~ 20.2 GHz Ka-bandRx Gain47.7 dBi @ 19.7 GHz (wo/ radome)G/T>22.8 dB/K @ 19.7 GHz (w/ radome)BUC Power10 WTx SidelobeMeets FCC 25.138Rx SidelobeCircular (Tx : RHCP, Rx : LHCP)	Radome Diameter	190.0 cm / 74.8"
Platform3-axis / Azimuth, Elevation, Cross-levelAzimuth RangeUnlimitedElevation Range-15°to +110°Cross-level RangeUp to ± 35°Stabilization Accuracy0.2° peak mis-pointing @ max ship motion conditionMotor Brake SystemDynamic Motor BrakeTx Frequency29.0 ~ 30.0 GHz Ku-bandTx Gain19.2 ~ 20.2 GHz Ka-bandRx Gain47.7 dBi @ 19.7 GHz (wo/ radome)G/T> 22.8 dB/K @ 19.7 GHz (w/ radome)BUC Power10 WTx SidelobeMeets FCC 25.138Rx SidelobeCircular (Tx : RHCP, Rx : LHCP)	Reflector Diameter	150.0 cm / 59.0"
Azimuth RangeUnlimitedAzimuth RangeUnlimitedElevation Range-15°to +110°Cross-level RangeUp to ± 35°Stabilization Accuracy0.2° peak mis-pointing @ max ship motion conditionMotor Brake SystemDynamic Motor BrakeTx Frequency29.0 ~ 30.0 GHz Ku-bandTx Gain50.9 dBi @ 29.5 GHz (wo/ radome)Rx Frequency19.2 ~ 20.2 GHz Ka-bandG/T>22.8 dB/K @ 19.7 GHz (wo/ radome)BUC Power10 WTx SidelobeMeets FCC 25.138Rx SidelobeCircular (Tx : RHCP, Rx : LHCP)	Weight	260 kg
FinancialInstantFilewation Range-15°to +110°Cross-level RangeUp to ± 35°Stabilization Accuracy0.2° peak mis-pointing @ max ship motion conditionMotor Brake SystemDynamic Motor BrakeTx Frequency29.0 ~ 30.0 GHz Ku-bandTx Gain50.9 dBi @ 29.5 GHz (wo/ radome)Rx Frequency19.2 ~ 20.2 GHz Ka-bandRx Gain47.7 dBi @ 19.7 GHz (wo/ radome)G/T> 22.8 dB/K @ 19.7 GHz (w/ radome)BUC Power10 WTx SidelobeMeets FCC 25.138Rx SidelobeCircular (Tx : RHCP, Rx : LHCP)	Platform	3-axis / Azimuth, Elevation, Cross-level
Cross-level RangeUp to ± 35°Stabilization Accuracy0.2° peak mis-pointing @ max ship motion conditionMotor Brake SystemDynamic Motor BrakeTx Frequency29.0 ~ 30.0 GHz Ku-bandTx Gain50.9 dBi @ 29.5 GHz (wo/ radome)Rx Frequency19.2 ~ 20.2 GHz Ka-bandG/T> 22.8 dB/K @ 19.7 GHz (wo/ radome)BUC Power10 WTx SidelobeMeets FCC 25.138Rx SidelobeCircular (Tx : RHCP, Rx : LHCP)	Azimuth Range	Unlimited
Stabilization Accuracy0.2° peak mis-pointing @ max ship motion conditionMotor Brake SystemDynamic Motor BrakeTx Frequency29.0 ~ 30.0 GHz Ku-bandTx Gain50.9 dBi @ 29.5 GHz (wo/ radome)Rx Frequency19.2 ~ 20.2 GHz Ka-bandRx Gain47.7 dBi @ 19.7 GHz (wo/ radome)G/T> 22.8 dB/K @ 19.7 GHz (w/ radome)BUC Power10 WTx SidelobeMeets FCC 25.138Rx SidelobeCircular (Tx : RHCP, Rx : LHCP)	Elevation Range	-15°to +110°
Motor Brake SystemDynamic Motor BrakeTx Frequency29.0 ~ 30.0 GHz Ku-bandTx Gain50.9 dBi @ 29.5 GHz (wo/ radome)Rx Frequency19.2 ~ 20.2 GHz Ka-bandRx Gain47.7 dBi @ 19.7 GHz (wo/ radome)G/T> 22.8 dB/K @ 19.7 GHz (w/ radome)BUC Power10 WTx SidelobeMeets FCC 25.138Rx SidelobeCircular (Tx : RHCP, Rx : LHCP)	Cross-level Range	Up to $\pm 35^{\circ}$
Tx Frequency29.0 ~ 30.0 GHz Ku-bandTx Gain50.9 dBi @ 29.5 GHz (wo/ radome)Rx Frequency19.2 ~ 20.2 GHz Ka-bandRx Gain47.7 dBi @ 19.7 GHz (wo/ radome)G/T> 22.8 dB/K @ 19.7 GHz (w/ radome)BUC Power10 WTx SidelobeMeets FCC 25.138Rx SidelobeCircular (Tx : RHCP, Rx : LHCP)	Stabilization Accuracy	0.2° peak mis-pointing @ max ship motion condition
Tx Gain50.9 dBi @ 29.5 GHz (wo/ radome)Rx Frequency19.2 ~ 20.2 GHz Ka-bandRx Gain47.7 dBi @ 19.7 GHz (wo/ radome)G/T> 22.8 dB/K @ 19.7 GHz (w/ radome)BUC Power10 WTx SidelobeMeets FCC 25.138Rx SidelobeCircular (Tx : RHCP, Rx : LHCP)	Motor Brake System	Dynamic Motor Brake
Rx Frequency19.2 ~ 20.2 GHz Ka-bandRx Gain47.7 dBi @ 19.7 GHz (wo/ radome)G/T> 22.8 dB/K @ 19.7 GHz (w/ radome)BUC Power10 WTx SidelobeMeets FCC 25.138Rx SidelobeCircular (Tx : RHCP, Rx : LHCP)	Tx Frequency	29.0 ~ 30.0 GHz Ku-band
Rx Gain47.7 dBi @ 19.7 GHz (wo/ radome)G/T> 22.8 dB/K @ 19.7 GHz (w/ radome)BUC Power10 WTx SidelobeMeets FCC 25.138Rx SidelobeMeets FCC 25.209PolarizationCircular (Tx : RHCP, Rx : LHCP)	Tx Gain	50.9 dBi @ 29.5 GHz (wo/ radome)
G/T> 22.8 dB/K @ 19.7 GHz (w/ radome)BUC Power10 WTx SidelobeMeets FCC 25.138Rx SidelobeCircular (Tx : RHCP, Rx : LHCP)	Rx Frequency	19.2 ~ 20.2 GHz Ka-band
BUC Power 10 W   Tx Sidelobe Meets FCC 25.138   Rx Sidelobe Meets FCC 25.209   Polarization Circular (Tx : RHCP, Rx : LHCP)	Rx Gain	47.7 dBi @ 19.7 GHz (wo/ radome)
Tx Sidelobe Meets FCC 25.138   Rx Sidelobe Meets FCC 25.209   Polarization Circular (Tx : RHCP, Rx : LHCP)	G/T	> 22.8 dB/K @ 19.7 GHz (w/ radome)
Rx Sidelobe Meets FCC 25.209   Polarization Circular (Tx : RHCP, Rx : LHCP)	BUC Power	10 W
Polarization Circular (Tx : RHCP, Rx : LHCP)	Tx Sidelobe	Meets FCC 25.138
	Rx Sidelobe	Meets FCC 25.209
Antenna Cable Single 50 ohm Coax Cable	Polarization	Circular (Tx : RHCP, Rx : LHCP)
	Antenna Cable	Single 50 ohm Coax Cable

#### System Dimension



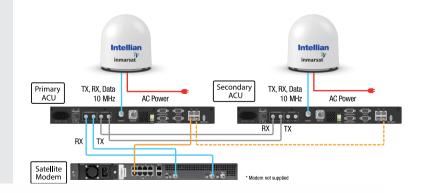
## System Diagram



#### Antenna Control Unit

Dimension (WxDxH)	43.1 cm x 41.1 cm x 4.4 cm / 17" x 16.1" x 1.7"
Weight	5.7 kg / 12.5 lbs
Display	256 x 64 Graphic OLED
Gyrocompass Interface	NMEA2000 / NMEA0183
Mediator Interface	GX Mediator Integrated
Modem Interface	GX Modem Integrated
Remote Management	Yes
Wi-Fi Operation	Yes (w/ Wi-Fi Dongle)
Management Port	Yes
Intellian LAN Port	Yes
Power Requirement	100 ~240 VAC, 50~60 Hz, 3A

# System Diagram (Dual Antenna)





MARINEQ Группа компаний