

X130D

KU/KA ELECTRONICALLY SWITCHABLE

DUAL-BAND MULTI-ORBIT VSAT



FEATURES

KU/KA ELECTRONICALLY SWITCHABLE SYSTEM

The Intellian X130D is a dual-band VSAT solution that electronically switches between Ku-band and Ka-band operation with a single command. It enables customers with the highest performance, versatility, and high bandwidth demand access to a wide range of service options. This dual band antenna offers seamless connectivity by eliminating the need for conversion kits, or hardware modifications required by conventional terminals.

EMBEDDED ANTENNA & MODEM MEDIATOR

The embedded antenna mediator enables an easy setup for dual-antenna configuration, which provides blockage mitigation and seamless connectivity. In conjunction with the modem mediator allows the connection for up to two GEO modems and failover capabilities.

HIGH POWER DELIVERY

The X130D offers a wide range of power options enabling greater throughput; It supports RF configuration up to a 40W BUC in Ku-Band and a 20W Transceiver in Ka-Band, designed and built by Intellian.

ANTENNA MANAGEMENT PLATFORM

Intellian's established and reliable integrated management platform, AptusNX, provides a responsive web user interface to manage and control the antenna system regardless of device type. AptusNX includes an intelligent installation wizard to simplify system configuration so that users can become connected faster than ever before. The platform also includes a diagnostic function that enables accurate and enhanced antenna performance checks both onboard and remotely. This reduces the need for onboard service personnel and improves performance.

MULTI-ORBIT TRACKING

Based on Intellian proven antenna design and multi-orbit GEO, MEO, and LEO tracking capabilities, the X130D can operate on any commercial Ku-band and Ka-band (2.5 GHz wide Ka-band coverage) services, enabling access to the highest bandwidth packages worldwide. Optimized to deliver low latency and high speed connectivity, the terminal will allow customers the flexibility to access next-generation LEO services and existing GEO and MEO constellations.



X130D



Mackay Marine – High Seas +1 281 479 1515 marinesales@mackaymarine.com Mackay Communications, Satellite Solutions +1 919 850 3100 satserv@mackaycomm.com

Mackay Marine Canada +1 902 469 8480 sales.canada@mackaymarine.com

Mackay Marine Alaska & Pacific Northwest NWsales@mackaymarine.com Ballard/SEA, WA +1 206 282 8080 Dutch Harbor, AK +1 253 922 6260

TECHNICAL SPECIFICATIONS

ABOVE DECK UNIT

Radome Height x Diameter 172.4 cm / 67.87" x 168.1 cm / 66.18"

Reflector Diameter $125 \, \mathrm{cm} / 49.21^\circ$ Weight $180 \, \mathrm{kg} / 396.83 \, \mathrm{lbs}$ Azimuth Range Unlimited Elevation Range -20° to 115° Cross-level Range $\pm 37^\circ$

Stabilization Accuracy 0.2° peak miss-pointing @max ship motion condition

Ku 13.75~14.5 GHz

 Tx Frequency
 13.75~14.5 GHz
 27.5~30.0 GHz

 Tx Gain
 42.7 dBi @14.0 GHz
 48.5 dBi @28.8 GHz

 Rx Frequency
 10.7~12.75 GHz
 17.7~20.2 GHz

 Rx Gain
 41.7 dBi @11.85 GHz
 45.5 dBi @19.0 GHz

G/T 20.4 dB/K 21.0 dB/K (@11.85 GHz, 30°EL) (@19.0 GHz, 20°EL)

RF Power 8W/16W/25W/40W BUC 20W XCVR

Polarization Linear (Cross & Co Pol) Circular (RHCP & LHCP)

Antenna Cable Dual 50 ohm Coaxial Cable

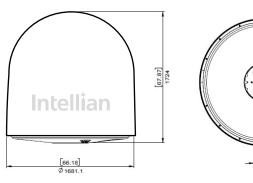
BELOW DECK TERMINAL

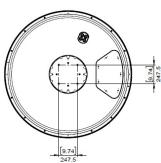
	Operational	-25 °C to +55 °C, Power On (IEC-60945)
Temperature	Survival	-40 °C to +80 °C, Powered On and a non-functional state (IEC-60945)
	Operational	IEC-60945
Vibration	Survival	IEC-60721-3-6 Class 6M3 DNV Standard No. 2.4, Class C
	Operational	IEC-60068-2-27 Method Ea 20 g, 7 ms
	Survival (Transient)	IEC-60721-3-6 Class 6M3 type II 30 g, 6 ms
	Survival (Bump)	IEC60721-3-6 Class 6M3 25g/6 ms

EMI / EMC RED Compliant

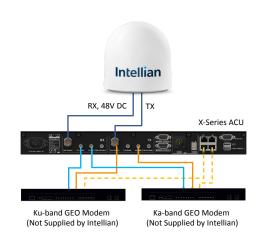
SYSTEM DIMENSION

ADU

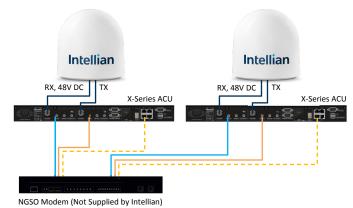




SYSTEM DIAGRAM (GEO KU-KA SOLUTION)



SYSTEM DIAGRAM (NGSO SOLUTION)



BELOW DECK TERMINAL

Dimensions (WxDxH) 43.1 cm x 39.0 cm x 4.4 cm / 16.97" x 15.35" x 1.73"

Weight 8.0 kg / 17.64 lbs. (TBD)

Display OLED Display

Gyrocompass Interface NMEA 2000, NMEA 0183

Mediator Interface Ethernet port / RS-232C / I/O Console

Remote Management Yes

Wi-Fi Operation Yes (w/ Wi-Fi dongle)

Management Port Yes
Intellian LAN Port Yes

Power Requirement 100 ~240 VAC. 50~60Hz. 3A

Global HQ

Innovation Center Intellian Technologies, Inc. T +82 31 379 1000

APAC

Seoul Intellian Technologies, Inc.

T +82 2 511 2244

Americas

Irvine
Intellian Technologies USA, Inc.
T +1 949 727 4498 Toll Free +1 888-201-9223

EMEA

Rotterdam Intellian B.V. T +31 1 0820 8655 Part No. 2022 X130D-DS1226