Intellian

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.

Intellian

X130D

TECHNICAL SPECIFICATIONS

ABOVE DECK UNIT

Radome Height x Diameter	172.4 cm / 67.87" x 168.1 cm / 66.18"
Reflector Diameter	125 cm / 49.21"
Weight	180 kg / 396.83 lbs
Azimuth Range	Unlimited
Elevation Range	-20° to 115°
Cross-level Range	± 37°
Stabilization Accuracy	0.2° peak miss-pointing @max ship motion condition

	Ku	Ka
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 (@11.85 GHz, 30°EL)	21.0 dB/K (@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

Temperature	Operational	-25 °C to +55 °C, Power On (IEC-60945)
	Survival	-40 °C to +80 °C, Powered On and a non-functional state (IEC-60945)
Vibration	Operational	IEC-60945
	Survival	IEC-60721-3-6 Class 6M3 DNV Standard No. 2.4, Class C
Shock	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

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

SYSTEM DIMENSION

ADU

SYSTEM DIAGRAM (GEO KU-KA SOLUTION)

RX, 48V DC   TX

X-Series ACU

Ku-band GEO Modem (Not Supplied by Intellian)   Ka-band GEO Modem (Not Supplied by Intellian)

SYSTEM DIAGRAM (NGSO SOLUTION)

RX, 48V DC   TX   X-Series ACU   RX, 48V DC   TX   X-Series ACU

NGSO Modem (Not Supplied by Intellian)

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

APAC
Seoul
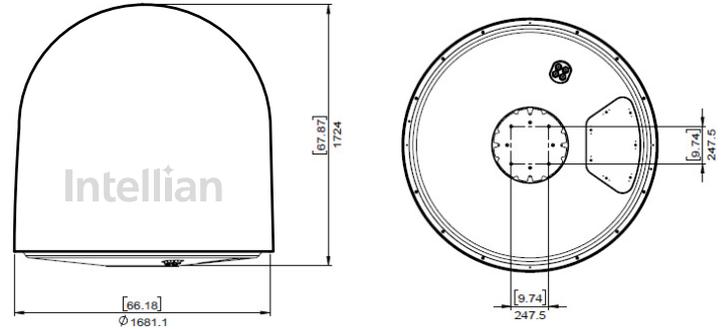Intellian Technologies, Inc.
T +82 2 511 2244

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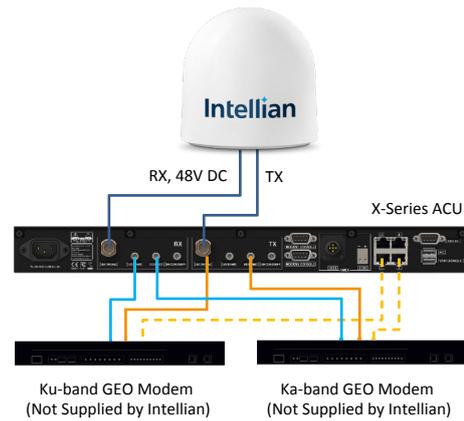T +1 949 727 4498   Toll Free +1 888-201-9223

EMEA
Rotterdam
Intellian B.V.
T +31 1 0820 8655