

PolaNt-x

High Precision Single- and Multi-Frequency GNSS antennas

For more information contact

NavtechGPS

Your ONE Source for GNSS Products and Solutions

+1-703-256-8900 or 800-628-0885

info@NavtechGPS.com

www.NavtechGPS.com



PolaNt-x MF

PolaNt-x SF

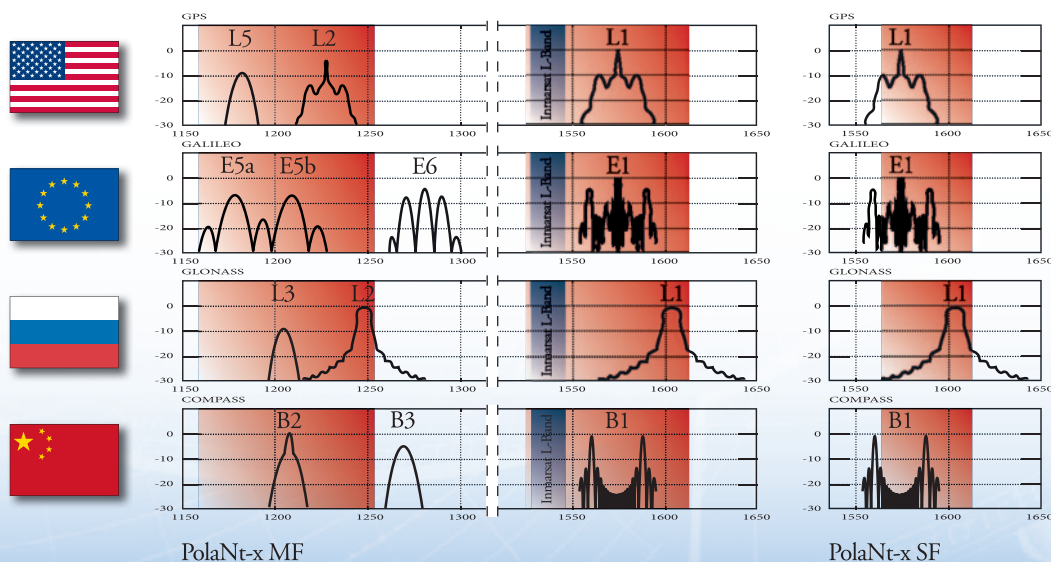
PolaNt-x is a family of lightweight high precision antennas for geodetic, survey and machine control applications.

These high-gain antennas incorporate low-noise amplifiers, enabling single- or multi-frequency GNSS signal reception, and are built into a rugged and environmentally sealed housing. The PolaNt-x antennas have an optimized ground plane design to provide excellent multipath characteristics.

Key Features

- Single- and multifrequency support for GPS, GALILEO, GLONASS and COMPASS signals
- Reception of Inmarsat L-Band signals* (Compatible with TERRASTAR™ services)
- Rugged design
- Superior Multipath characteristics

* PolaNt-x MF only



Versatile OEM Receivers for Demanding Applications

www.septentrio.com • info@septentrio.com

Septentrio nv, Greenhill Campus, Interleuvenlaan 15G, 3001 Leuven, Belgium
Phone +32 (0)16 300 800 • Fax +32 (0)16 221 640

US office: 20725 Western Avenue, Suite #144, Torrance, CA 90501
Phone: +1 (888) 655-9998 • Fax: +1 (323) 297 4648

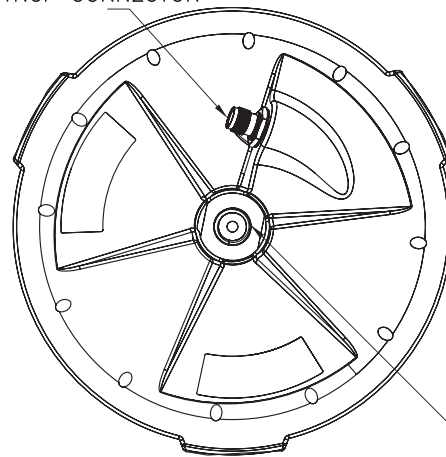
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DIMENSIONS



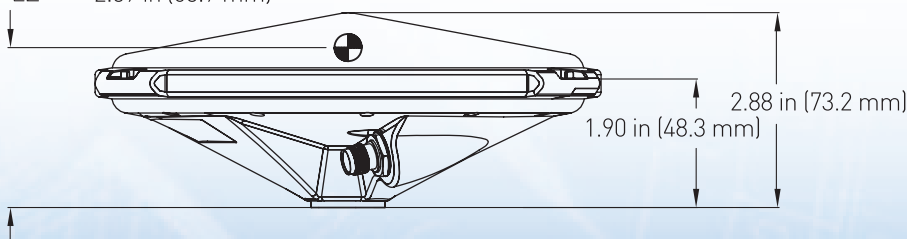
TNCF CONNECTOR



5/8-11 UNC-2B ADAPTER
PERMANENTLY INSTALLED

PHASE CENTER OFFSETS (ONLY RELEVANT FOR POLANT-X MF)

L1 = 2.28 in (57.8 mm)
L2 = 2.59 in (65.9 mm)



PolaNt-x MF

PolaNt-x SF

PERFORMANCE

	SF	MF
Frequency	1565-1615 MHz, L1, Glonass (G1)	1525-1610 MHz, L-Band*, L1, Glonass (G1) 1160-1252 MHz, L2, Glonass (G2), Galileo (L5)
Polarization	RHCP	
Axial Ratio	3dB max	

Radiation Coverage

$\theta = 0^\circ$	6.0 dBic	6.0 dBic
$0^\circ < \theta < 75^\circ$	-5.0 dBic	-2.0 dBic
$75^\circ \leq \theta < 80^\circ$	-6.0 dBic	-3.0 dBic
$80^\circ \leq \theta < 85^\circ$	-7.0 dBic	-4.0 dBic
$\theta = 90^\circ$	-8.0 dBic	-5.0 dBic

Amplifier

Gain	39 ± 2 dB
Noise Figure	2.6 dB max
Input Voltage	+3 to +15 VDC
Current	45 mA (typ)
Impedance	50 Ω
VSWR	$\leq 2.0:1$

PHYSICAL AND ENVIRONMENTAL

Finish	Weatherable polymer	
Weight	≈ 450 gr	
Diameter	190 mm	
Connector	TNC Female	
Altitude	≤ 3600 m (12000ft)	
Temperature	-40°C to +70°C	-50°C to +70°C

*The PolaNt-x MF is compatible with TERRASTAR™ signals.

TERRASTAR

OTHER SEPTENTRIO PRODUCTS

AsteRx-m – Ultra low power, smaller than credit card GPS/GLONASS dual-frequency RTK receiver, for integration in hand-held devices, mobile computing platforms and other space-constrained applications requiring high accuracy and low-power consumption.

AsteRx2e/2eL – Compact dual-frequency GPS/GLO-NASS receiver platform, offering top-quality GPS code and carrier phase data and dual-frequency positioning (including DGPS, RTK and PPP (AsteRx2eL)) at up to 25 Hz.

AsteRx3 – A Multi-frequency GPS/GLONASS/GALILEO receiver for demanding industrial applications, featuring precise RTK with extended baselines, advanced multipath and interference mitigation and exceptional tracking stability under high vibration conditions.

AsteRx2eH – A unique single-board dual-frequency multi-antenna GPS/GLONASS receiver in a waterproof aluminum housing, that can be connected to 2 antennas for various machine control, heading and other multi-antenna applications.

AsteRxi – IMU assisted Compact Dual-frequency GNSS receiver platform, offering a 50Hz RTK position based on integrated IMU and GNSS measurements. In addition attitude information such as heading, pitch and roll are provided even in shadowed environments where conventional GNSS receivers fail.

PolaRx4 – fully featured high performance GNSS receiver providing network operators and scientific users with high-quality tracking and measurement of all available and upcoming GNSS signals (GPS/GALILEO/GLONASS/COMPASS/SBAS)

PolaRxS – a multi-frequency multi-constellation receiver dedicated to ionospheric monitoring and space weather applications

Choking MC – A multi-frequency GPS/GLONASS/Galileo L1/L2/E5abAltBOC choking antenna for use with the PolaRx receiver family

RxTools – A suite of software applications for easy control of PolaRx and AsteRx receivers, and for easy manipulation, analysis and reporting of the data generated with these receivers

RxMobile – A unique intuitive, portable GUI field controller for the Septentrio receivers. RxMobile allows controlling the receiver, monitoring the navigation solution and accessing its functions in the field in the same intuitive way as with RxControl.



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