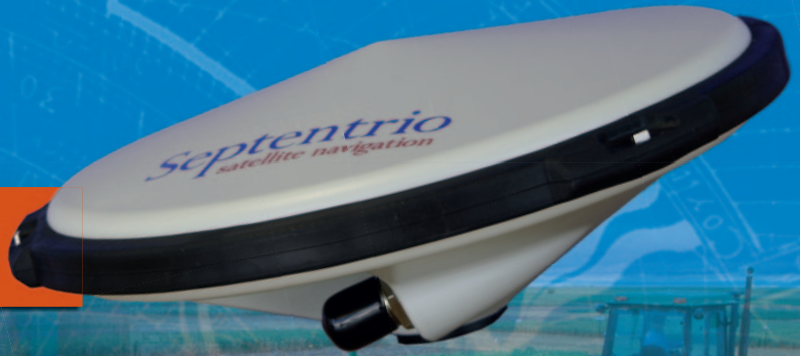


# PolaNt-x

High Precision Single- and Multi-Frequency GNSS antennas



PolaNt-x MF

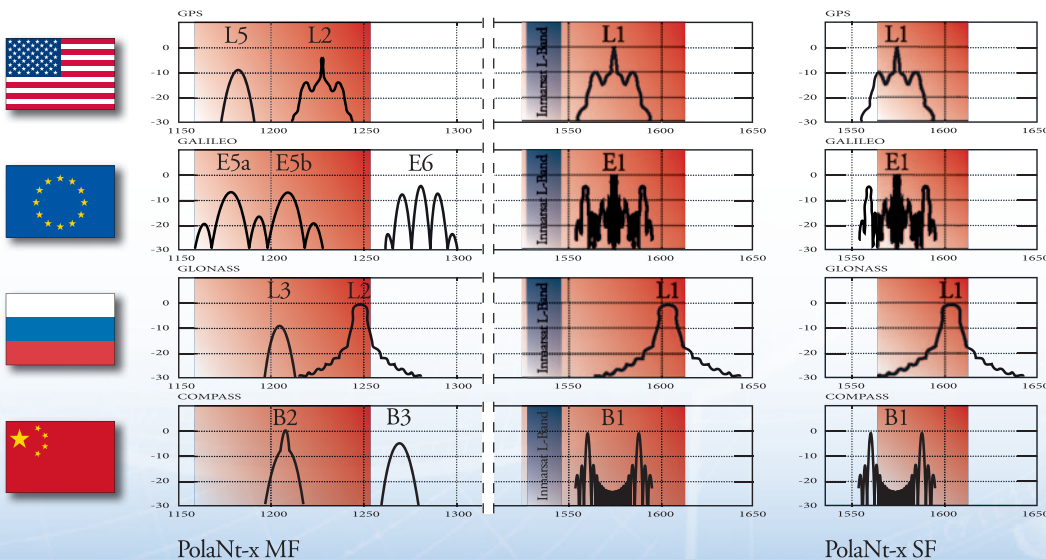
PolaNt-x SF

*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



PolaNt-x MF

PolaNt-x SF



Versatile OEM Receivers for Demanding Applications

# PolaNt-x

## High Precision Single- and Multi-Frequency GNSS antennas



PolaNt-x MF

PolaNt-x SF

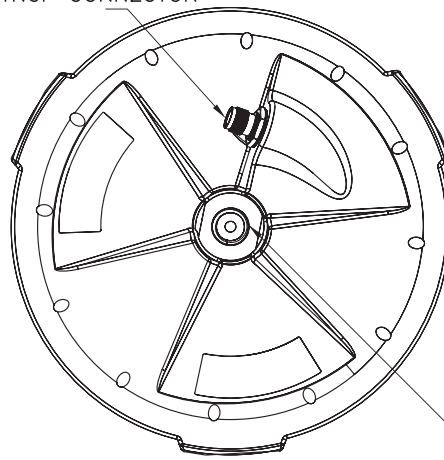
### DIMENSIONS



Ø 7.50 in (190.5 mm)

Septentrio  
satellite navigation

TNCF CONNECTOR



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

	SF	MF
--	----	----

### PERFORMANCE

Frequency	1565-1615 MHz, L1, Glonass (G1)	1525-1610 MHz, L-Band*, L1, Glonass (G1), 1160-1252 MHz, L2, Glonass (G2), Galileo (L5)
-----------	---------------------------------	---

<b>Polarization</b>	RHCP	
<b>Axial Ratio</b>	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

<b>Gain</b>	39 ± 2 dB
<b>Noise Figure</b>	2.6 dB max
<b>Input Voltage</b>	+3 to +15 VDC
<b>Current</b>	45 mA (typ)
<b>Impedance</b>	50 Ω
<b>VSWR</b>	≤ 2.0:1

### PHYSICAL AND ENVIRONMENTAL

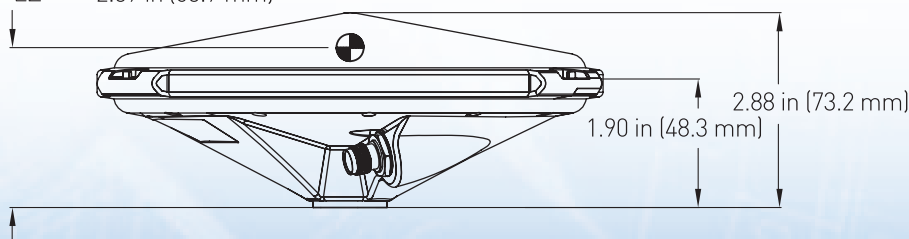
<b>Finish</b>	Weatherable polymer	
<b>Weight</b>	≈ 450 gr	
<b>Diameter</b>	190 mm	
<b>Connector</b>	TNC Female	
<b>Altitude</b>	≤ 3600m (12000ft)	
<b>Temperature</b>	-40°C to +70°C	-50°C to +70°C

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

TERRASTAR

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

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



### 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.

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



Versatile OEM Receivers for Demanding Applications