

NPE's BLAST sensor platform is intended for use with ANT connected networks and devices. These self-contained BLAST based sensors are capable of measuring physical events via on-board sensors. The sensor data can be logged in non-volatile memory and/or transmitted on ANT/ANT+ networks. The device is powered by a single CR2032 coin cell battery and is intended to be replaced once depleted.

Required Equipment

BLAST sensor device

CR2032 coin cell

ANT network connectivity

In-situ sensory mounting apparatus

Typical installations based on applicationVibration Sensing

Bond sensor to object/surface of interest. Ensure no metallic objects impede RF transmission. This application detects vibration to determine its state of operation and/or state of wear & tear.

Light Sensing

Bond sensor to surface whose light level is of interest. Ensure no metallic objects impede RF transmission. The purpose is to quantify light levels incident on the board sensor. This determination can be used to sense reflective objects or measure incident lux.

Magnetic Field sensing.

Bond sensor to object whose bearing is of interest. Ensure no metallic objects impede RF transmission. The purpose is to determine the orientation/ bearing of an object.

Pairing Pod – RSSI measurement

Ensure minimal obstruction between BLAST and ANT transmitter. RSSI measurement is used to determine proximity of ANT devices or to identify a specific ANT device by proximity.

Analog sensing

Place sensor near device of interest. Ensure no metallic objects impede RF transmission. One example is measuring a Polar pulse signal and re-broadcasting in ANT format.

FCC Rules**Compliance Statement (Part 15.19)**

The enclosed hardware device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received including interference that may cause undesired operation.

Warning (Part 15.21)

Changes or modifications not expressly approved by North Pole Engineering could void the user's authority to operate the equipment. Manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

Compliance Statement (Part 15.105(b))

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Industry Canada (IC) regulatory information

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie

Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Class B digital device notice

This Class B digital apparatus complies with Canadian

ICES-003, RSS-Gen and RSS-210.

Cet appareil numérique de la classe B est conforme à

la norme CAN ICES-3 (B)/NMB-3(B).

