

Fishing gear monitoring sensor

PX miniCatch

The PX miniCatch is a wireless multifunction gear monitoring sensor. The PX miniCatch sensor is provided in several different versions. The version is defined by the type of sensor lid.

Some professionals claim that the catch measurement is the most important measurement on the trawl. Knowing the quantity of fish entering the trawl can help you perform more efficient and sustainable fishing. It also serves a security purpose since it prevents the gear to be damaged by an excessive catch.

The PX miniCatch monitors the expansion of the meshes. Once the volume caught is enough to expand the meshes, they will pull the detector wires and engage the sensor. The sensitivity of the sensor can easily be adjusted by simply extending the rubber bands attachment. Once the trawl is filled to the chosen location, the sensor is engaged, and you know that it is time to haul. Additionally, the PX miniCatch can measure height with its 70 kHz transducer.

Versions

The sensor is provided in several different versions:

- Standard (neutral lid)
- Catch/Temperature (C/T lid)
- Depth/Temperature (D/T lid)

KEY FEATURES

- The Simrad PX miniCatch offers the possibility of combining Depth, Temperature and Catch measurements.
- This gear monitoring sensor is considerably smaller and lighter than other sensors, which improves its performance during operations.





The basic version of the sensor has a neutral lid and a side pull that allow a great combination of measurements. In order to receive the information from the sensor you need a suitable receiver and one or more hydrophones.

Available measurements

The specific measurements a sensor can make depend on its lid type, its physical location on the gear, and on the type of receiver you use.

When configured for a PI receiver, the PX miniCatch sensor can make one of the following measurements:

- PI Catch
- FA701 Catch
- PI Catch + FA701 Catch

When configured for a SR receiver, the PX miniCatch sensor can make one or more of the following measurements:

- Catch (side pull / C/T lid)

- Pitch

- FA701 Catch (side pull / C/T

- Battery status

lid) – Roll - Temperature (Lid dependant)

Depth (Lid dependant)

Battery lifetime

The battery lifetime of a sensor depends on its number of measurements and their update rate, channel and output power, as well as the water temperature.

Normal charging time for a fully depleted sensor battery is approximately three hours.

Technical specifications

Maximum depth: 1,000 m (unless otherwise specified on the sensor lid)

Communication transducer:

– Beamwidth: 60° (-3 dB)

- Source level: 187 dB (maximum power)

- Communication range: typical 1,500-2,500 m

Roll angle measurement: ±90° (Excepted error is 1% of the configured measurement range. The measurement error depends on the acoustic receiving conditions.)

Pitch angle measurement: ±90° (±2° accuracy)

Height measurement range: 0.7-95 m

Depth accuracy: 0.1 % of full scale depth (lid dependant)

Update rate: 1.9-35 seconds approx. **Weights and outline dimensions:** Weight in air: 5 kg approximately

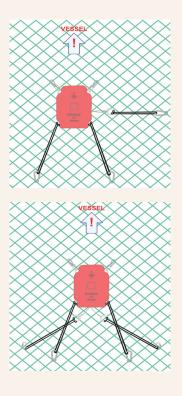
Weight in water: 1.5 kg approximately Outline dimensions: – Height: 98 mm

- Height: 98 mm - Width: 178 mm - Length: 238 mm



Mounting

For maximum performance, place your sensor on the cod end. The location of the sensor will determine the available measurements. For both trawl and purse seine mountings, the load on the sensor lugs must not exceed 800 kg.



When installed on the trawl's cod end, the PX miniCatch admits both the C/T and the D/T lids. If the sensor is used on a purse seine system, we recommend that the sensor is protected by means of a deployment pack.