



TRELLEBORG'S SAFEPILOT CAT ROT AND CAT I – PROFESSIONAL PILOTING UNITS



CAT ROT

Trelleborg's CAT ROT is a small and compact pilot unit primarily designed to connect to a ship's AIS pilot plug and transmit data via Wi-Fi to the Pilot's tablet / notebook.

AIS is primarily intended for information, but not navigation. The AIS data format available from the pilot plug does not provide sufficient resolution in heading, nor in rate of turn. These parameters is, however, vital from a navigational perspective. In particular, if quality predictions are of the essence.

The CAT ROT is designed to overcome the shortcomings of the AIS pilot plug data format by generating an accurate real time rate of turn and providing the missing decimal readings to the heading data via an integrated rate sensor, intelligent processing and advanced Kalman filter integrated into the unit.

All the data collected are transmitted to the pilot's display via Wi-Fi connection, which ensures a stable long range.



CAT I

Trelleborg's CAT I supplements our CAT ROT with highly accurate speed measurements and independent GNSS positioning.

A ship's AIS data can be compromised due to the quality of the ship's instruments or human errors. In order to ensure the most reliable data for piloting, our CAT I provides GNSS positioning, which is independent from the ship's instruments.

Our CAT I is capable of receiving all major GNSS types depending on the geographic coverage of GNSS as well as available SBAS systems.

CAT ROT / CAT I combination provides:

CAT ROT	CAT I
Heading with decimal degrees	Speed 1 cm/sec (RMS)
ROT <0.5 deg	Position (GPS/GLONASS/SBAS) acc. <0.6 m (RMS)
AIS targets	

Specification and Performance Data

- Rate sensor
- Navigation processor
- Intelligent filtering
- Decimal degree on heading
- Reliable, real time ROT
- AIS targets
- Reduced weight
- Pocket size
- Low power consumption
- USB charge
- Autopolarity conversion (APC)
- Access point functionality (Infrastructure W LAN)
- IP65 Ingress Protection Marking iaw. IEC standard 60529
- Magnets in bottom plate for easy mounting on steel structure

SPECIFICATIONS	CAT ROT	CAT I
Weight	330g	410g
Dimensions	138 x 100 x 25 mm	138 x 100 x 25 mm
Heading resolution	0.1 deg	–
ROT	<0.5 deg/min	–
Integrated rate sensor	Yes	–
Charge time	5 hours	5 hours
Battery capacity	18 hours, Li Ion	14 hours, Li Ion
GNSS	L1 GPS w. SBAS EGNOS, WAAS	L1 GPS / GLONASS w. SBAS, BEIDOU prepared
Wi-Fi link to pilot's display (connection to multiple displays allowed)	Yes	Yes
Wi-Fi range	200m line of sight	200m line of sight
USB charge	Yes	Yes
AIS targets	from ship's AIS	–
Speed accuracy	from ship's instruments	1 cm/sec (RMS)
Position accuracy w/ SBAS	<3.0m (RMS)	<0.6m (RMS)
Option for ship's shore link GPRS or (UMTS)	Via pilot's tablet/note book	Via pilot tablet/note book



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