

# CAT ROT Wireless AIS pilot plug adapter

## E-Sea Fix CAT ROT

The E-Sea Fix CAT ROT is a small and compact pilot unit primarily designed to connect to a ship AIS pilot plug and transmit data via Wi-Fi to the Pilots notebook.

The CAT ROT has an integrated rate sensor thus providing decimal degrees to the heading information, a valid Rate-Of-Turn (ROT) and reliable predictions.

As a backup solution the CAT ROT has an integrated GPS receiver. So should the pilot plug become defective for any reason the CAT ROT can, crucially, act independently if taken to the bridge wing to acquire a GPS signal.

## New features

1. A built-in Rate sensor enabling the unit to provide decimal degrees to the gyro data coming from the AIS as well as stable ROT output.
2. Reduced size and weight (490g).
3. Reduced power consumption.
4. New Wi-Fi antenna design gives the wireless connection added robustness.
5. Total weight 650g including iPhone

**490 gram  
with built-in:**

- GPS Unit
- Turn sensor
- Navigation processor



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# CAT ROT & CAT BASIC

## TECHNICAL DATA

### EXAMPLE 1

- All data from Pilot Plug



### EXAMPLE 2

- Defect Pilot Plug. Position data from CAT I



Features	Connected to Pilot Plug (AIS)	Stand-alone
Position GPS stand alone typical	3,6m RMS	3,6m RMS
Heading from ship gyro (with added decimal)	0,1° RES	Only past track heading
Rate of turn (ROT)	< 2 deg/min	< 2 deg/min
Speed	0,1 knots RES	0,1 knots RES
Integrated rate sensor (several minutes dead reckoning on lost GPS)	Yes	Yes
Wi-Fi connection to pilot display	Yes	Yes
Cable connection to AIS pilot plug	Yes	N/A
Ship shore link via GPRS or UMTS	Option	Option
Battery capacity (standard)	11 hours	11 hours
Unit weight	0,49 kg	0,49 kg



**The CAT is also available in a version without Turn sensor called CAT Basic**

The majority of AIS receivers do not provide decimal degrees as well as ROT to the pilot plug. These parameters are vital for the pilot when maneuvering. Now, with the integrated rate sensor in the E-Sea Fix CAT ROT, in combination with the ships' gyro data taken from the AIS output and with the advanced Kalman filtering, we are now able to generate accurate ROT and decimal readings to the gyro output.

This makes the E-Sea Fix CAT ROT unique compared to units that simply transfer raw AIS pilot plug data to the pilot computer. The E-Sea Fix CAT ROT does not require any dedicated software program and can support the most common pilot software on the market.

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