TRELLEBORG'S SAFEPILOT BEIDOU SYSTEM – PROFESSIONAL PILOTING SOLUTION

INTRODUCTION

Trelleborg is embracing the modern Chinese GNSS system, BEIDOU. With the CAT I BEIDOU product used in combination with our SafePilot app, our Chinese customers can choose the GNSS system to use on the fly.

SAFEPILOT

Trelleborg's SafePilot (for iPad) is a new generation of navigation & piloting software designed by a dedicated team of dedicated software programmers working closely together with marine pilots worldwide.

The user friendly PPU software with touch screen technology is built on an intelligent kernel for handling multi-layered charts. And adding unbeatable features with integration of requirements from pilots of practical functions, easy and handy operation as well as flexible software packages.

CAT ROT

The 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.

CAT I BEIDOU

The SafePilot CAT I Beidou is a stand-alone high accuracy GPS receiver with the capability of GPS/ Beidou and available SBAS systems such as EGNOS, WAAS, MSAS and GAGAN.

CAT I Beidou is an add-on option to a CAT ROT for operations that demand more accurate positioning than the ship's own positioning. CAT I Beidou enables the users to freely switch GNSS types between the US GPS and the Chinese Beidou.

The magnetic bottom of CAT I facilitates easy and speedy set-up of the unit on the bridge wing of a ship.

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

The preferred positioning systems can be selected through SafePilot software.

Specification and Performance Data

❚ Wireless

❚ Pilot plug apdaptor

❚ Independent and most accurate Rate-of-Turn
sensor

❚ Independent and highly accurate positioning and
speed measurement

❚ Selectable GNSS options

❚ BeiDou capable

❚ Easy to use

❚ Low weight and size

PHYSICAL	CAT ROT	CAT I BEIDOU
Weight	330g	410g
Dimensions	128 x 100 x 25 mm	128 x 100 x 25 mm
ACCURACY OF MEASUREMENT	**CAT ROT**	**CAT I BEIDOU**
Rate of Turn	< 0.5 degrees / min	NA
Heading resolution	0.1 degree	NA
Speed	From ship	1 cm/s (RMS)
Position (SBAS)	From ship	0.6 m (RMS)
POWER	**CAT ROT**	**CAT I BEIDOU**
Battery capacity	22 hours	17 hours
USB charge	Yes	Yes
Charge time	5 hours	5 hours
SBAS	**CAT ROT**	**CAT I BEIDOU**
EGNOS	Yes	Yes
WAAS	Yes	Yes
MSAS	Yes	Yes
SNAS	Yes	Yes
INTERFACE	**CAT ROT**	**CAT I BEIDOU**
Power	USB	USB
Pilot plug	YES	NA
Auto polarity conversion	YES	NA
Wi-Fi	YES	YES
Wi-Fi range	200m line of sight	200m line of sight
GNSS	**CAT ROT**	**CAT I BEIDOU**
GPS	YES	Yes
Galileo	No	Yes
BeiDou	No	Yes
Glonass	No	Yes
Selectable	No	Yes
ENVIRONMENTAL	**CAT ROT**	**CAT I BEIDOU**
Operating temperature	-20°C to +50°C	-20°C to +50°C
Waterproof	IP65	IP65

Website: trelleborg.com/marine
Email: TMS.Denmark@trelleborg.com