

# Combined repeater for LMN6 speed log



## Main functions:

The combined repeater for LMN6 is designed to withstand harsh conditions onboard warships. It complies with military and maritime standards and is intended to be installed on the bridge.

- It displays on a 7" colour touchscreen navigation information: speeds, total and daily distances travelled, speed log status and alarms.
- It enables the user to set up the speed log using either the software or hardware function keys.
- An embedded software manages communications with the main cabinet and performs user's commands.

## Architecture:

- The combined repeater consists of a ruggedized housing, including a PCB, a 7" colour touchscreen and selection buttons.
- It is connected to LMN6 speed log through a serial link including two proprietary RS442 ports.

## Exploitation modes:

- Operational mode: the touchscreen enables the user to control the speed log and to display navigation information,
- Maintenance mode: the speed log setup and configuration parameters are reached through the menu.

## Features:

- Ergonomic HMI, access to the different functions through a prioritized menu, thanks to four software and four hardware function keys.
- **Information display:**
  - Speed in analogical and digital formats (sensor 1 or sensor 2 or mean of both sensors),
  - Daily travelled distance with reset feature,
  - Total travelled distance,
  - Speed log alarms
- **Speed log functional configuration:**
  - Sensor selection,
  - Damping,
  - Linearization curve
- Display settable in day or night modes
- Brightness adjustment.

## Digital interfaces:

2 x proprietary RS422 ports (functional interface with the speed log and maintenance interface),

## User interfaces:

- Hardware: 7" colour touchscreen with 800 X 480 definition
- Software: Supervision HMI

## Outputs:

Outputs status are displayed by three colours LED:

- green for correct transmission,
- red for default,
- switched off for inhibited output.

## Environmental data:

- Power supply: 28VDC or 85 to 264VAC single phase - frequency: 47 to 63 Hz
- Power: < 12 W
- I/O: MIL-DTL-38999 series III connectors,
- Operating temperature: -15° C to +55° C
- Weight: 3.85 kg +/- 200g
- Dimensions: 244mm x 164mm x 92mm (excluding attachment elements)
- Attachment: The repeater can be integrated into a panel or fixed using a clamp (bracket),
- Colour: RAL 7038 (other on demand).

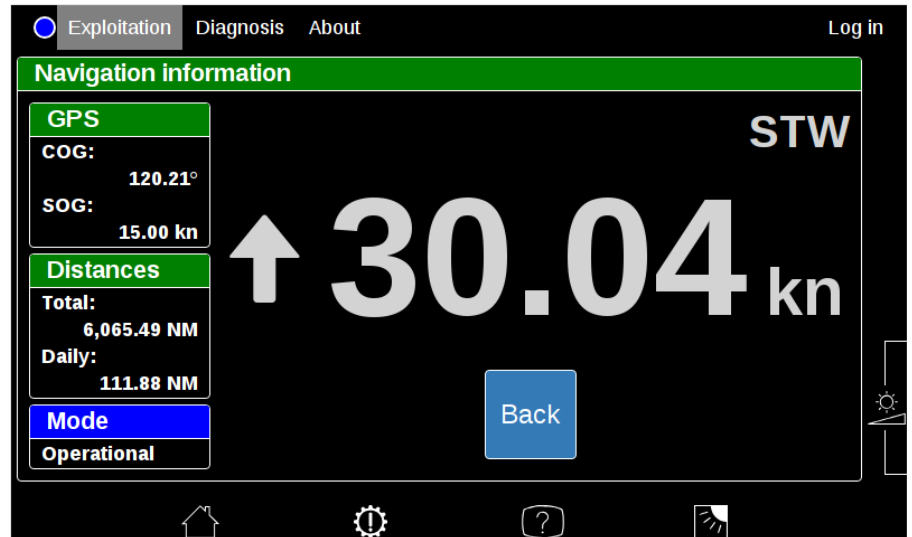
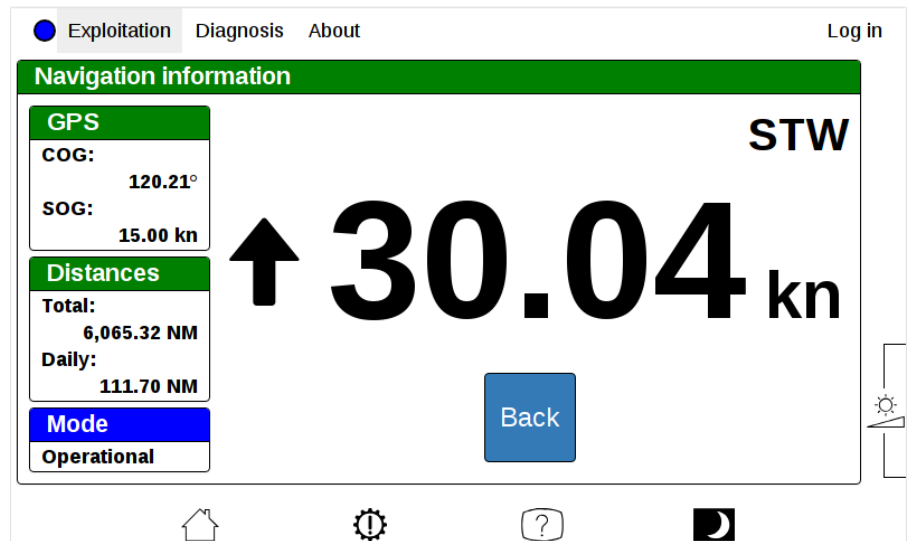
## Product reference:

- NATO code: F7582
- Manufacturer reference: 105 068
- Options: on demand

Designed and made in France by Atos.

## Standards compliance:

- Standard GAM EG13
- SOLAS 74 convention with amendments V/18, V/19 et X/3
- IMO resolution MSC.97 (73) (2000 HSC code) 13
- IMO resolution A.694(17)
- IMO resolution A.824(19)
- IMO resolution MSC.96(72)
- IMO resolution 191(79)
- IEC 60529 Protection
- IEC 60945 (2002) Incl. Corr 1 (2008)
- IEC 61023 (2007)
- IEC 62288 Ed.2 (2014)
- IEC 61162-1 Ed. 4.0 (2010) Incl. Corr 1 (2013)
- IEC61162-450 (2011)
- NMEA-0183
- TIA/EIA-422-B
- Wheelmark 2014/90/UE



According to 96/98/CE Marine Equipment Directive

For more information  
[benmarine.fr](http://benmarine.fr)  
[benmarine@atos.net](mailto:benmarine@atos.net)

Atos, the Atos logo, Atos Syntel and Unify are registered trademarks of the Atos group. October 2019 © Copyright 2019, Atos S.E. Confidential information owned by Atos, to be used by the recipient only. This document, or any part of it, may not be reproduced, copied, circulated and/or distributed nor quoted without prior written approval from Atos.