



amesys  
BEN

## LMN 5 NAVAL E/M SPEED LOG

*Single or dual axis speed measurement*



*The LMN5 E/M Log perfectly meets the climatic, mechanical and radio electrical resistance standards applicable to the equipment on board the Navy ships.*

*The LMN5 E/M Log comprises an electromagnetic sensor, a processing unit, a repeater and a programming console.*

### Standards :

- Standard Mil GAM EG 13
- Wheelmark IEC 60945, IEC 61023, IEC 61162

### **MAIN FEATURES**

- Power supply :  
115 V or 220 V, 50/60 Hz,  
Or 28 Vdc
- **Transducers :**
- 130 EB, 65.2.RVB or lens E/M sensor for the surface vessels,
- 130.FIMN.12 E/M sensor for submarines.



## INTERFACE

### Inputs/Outputs

Accessible through the corresponding connectors :

- 28Vdc power supply or other,
- inductor/electrode sensor data,
- 2 x 1/200 mile potential free contact output\*,
- 2 x 1/10 mile potential free contact output\*, or alarm function threshold,
- 2 x programmable 1/200 or 1/100 or 1/10 mile inputs\*,
- 1 x potential free contact alarm output\*,
- 1 x RS422 output, IEC61162-1,
- 2 x RS422 output to dialog with the repeater.

(\*) breaking capacity 24V-250mA

## OPTIONS

- 1 x programmable synchro output (5VA – 400 or 60 Hz),
- External Commutation and Distribution Cabinet CDC,
- 5 x RS422 outputs IEC61162 or for customization,
- External Digital/Synchro Cabinets – 1 and 5 synchro outputs – 5 VA – 400 or 60 Hz,
- 1 x Current output, 0-500 $\mu$ A or 0/10V (programmable full scale),
- 2 sensors commutation module,
- XY version.

THIS DATA SHEET IS SUBJECT TO ALTERATION WITHOUT NOTICE

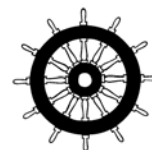
## PERFORMANCE DATA

- Measurement scale  $\pm$  60 knots.
- Speed :
  - speed indicators resolution : 0,1 knot,
  - speed accuracy : 0,1 kts for speed < 10 kts and 1% for speed > 10 kts,
  - damping time constant : 4, 16, 32 seconds,
  - sampling period : 8 Hz,
  - electronics linearity : instrument accuracy 0,1 % of full scale reading,
  - zero stability : 0,04 knot,
  - measurement reliability in laboratory : 0,1 % of full scale reading.
- Distance :
  - scale : 0 to 99999,9 NM,
  - accuracy better than 0,1 NM whatever the speed,
  - speed simulation.

## ILS

### Very Low Operational demand

A sensor factor computation allows an automatic calibration, value adaptation in order to reduce time and efforts to a minimum when a change of sensor occurs.



Type Approval **96/98 EC**  
Speed and Distance Measuring Equipment