NAV-IS Commercial EM Speed Log & Meteorological System



Excellence in Naval Engineering

ALLE

THE COST-EFFECTIVE SOLUTION



Cost-effective EM speed log with optional meteorological capabilities

± 0.2kn accurate 0-10kn -10<30kn speed ranges



Nav-IS is a cost-effective, reliable and accurate Electromagnetic Speed Log System with optional Meteorological System capabilities. The system is suitable for all Marine applications, ranging from ocean-going merchant and passenger vessels to coastal patrol craft and naval support ships.

Proven integration

Combination single/dual axis EM Log utilising the latest proven and in service solid state sensor technology for a low cost, integrated solution.

MAIN ELECTRONICS UNIT (MEU)

- Provides the power to and processes the inputs from the EM Speed, Wind and Meteorological sensors
- Automatically selects most windward anemometer (where two wind sensors are installed)
- Calculates True Wind Speed & Direction (where NMEA HDT input is provided)
- 2 x RS422 NMEA Log & Meteorological buffered data outputs
- 2 x simulated potentiometer outputs (0.1 volts/knot)
- Four user selectable potential free contacts to provide any combination of 100, 200 and 400 Pulses Per Mile outputs

MARITIME PANEL COMPUTER (MPC)

Power: 115 or 230V 50/60Hz

Sizes

Mounting

Weight

Type

Enclosure

Resolution

Brightness

Dimming

CPU

RAM

Storage

Operating System

International

Standard

Ingress

Temp

Protection

Operational

INPUT / OUTPUT

Supply Voltage

Response Time

Contrast Ratio

Dimensions

- Dimensions: 420x340x187 mm
- Weight: 15kg

MECHANICAL

DISPLAY

COMPUTER

ENVIRONMENTAL

TEMP

TERFACES

Based on AGI's 10.4" military Multi-Function Colour Repeater

340mm (w) x 256mm (h) x 102mm (d) (panel mount version)

Panel mount or steel bulkhead mounting bracket

5.0kg approx. (excluding mounting brackets)

Painted aluminium enclosure

10.4" TFT VGA display

450 cd/m2 Dimming

AMD Geode LX800

Dimmable to zero brightness

Linux for AGI proprietary S/W

IEC/EN60945 (protected equipment-EMC)

IP65 front panel (for console mounting)

panel), 2x 10/100 Base TX (RJ45) Ethernet

1x RS232 / 2x RS422 (RS422 Opto-isolated),1x USB port (front

115/230 VAC

640 x 480

18ms

900:1

512MB Flash card



- Flush fixed probe: single or dual axis
- High speed probe: fin shaped, for high speed applications
- Retractable probe: combination
 of probe and gate valve



ELECTROMAGNETIC (EM) SPEED LOG SPECIFICATION

Speed Range	-10 to +30 knots (+60 knots for high speed version)
Forward speed accuracy	0-10 knots ±0.2 knots, Above 10 knots ±2%
Distance Accuracy	Distance derived from forward speed. The greater of 0.2NM or 2% of distance run
A thwartships accuracy where dual axis sensor	Typically ± 0.25 knots for 0-10 knots

METEOROLOGICAL SENSORS

ULTRASONIC ANEMOMETER			
Operating Range	0-65m/s (approx 125 knots)	ľ	,
Wind speed accuracy	2%; Resolution 0.01m/s		
Wind direction	0-359°		
Accuracy	±2°; Resolution 1°	L	

TEMPERATURE AND HUMIDITY SENSOR		
Temperature Range	-40 to +70°C	
Accuracy	±0.3°C at 25°C; ±0.4°C over +5 to +40°C	
Humidity Range	0-100% RH	
Accuracy at 25°C	±2% RH over 10-90%; ±4% over 0-100%	
Long Term Stability	Better than \pm 1% RH per year	

SEA WATER TEMPERATURE		
Operating Range	-5°C to +45°C	
Accuracy	±0.3°C	

BAROMETRIC AIR PRESSURE MODULE

Operating Range	500 – 1100 hPa
Accuracy	0.05% of pressure range (or 0.2hPa at 25°C)

For more information or to enquire about our **bespoke design services** please get in touch:

T +44 (0)1202 685 661 (opt 2)

-15°C to 55°C

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