Helm Order Monitor — Type Approved for Marine Applications

Helm Order Monitor is the first technological solution to the problem of insufficient monitoring of helm orders between helmsman and pilot or navigator onboard ships

DuraPANEL PC 7"

- Wide Temperature Range
- Ambient Light Sensor
- Integrated Buzzer
- IEC 60945 and IACS E10
- NMEA0183 input via RS422
- Designed for 24/7 usage
- Low power Consumption
- Fan-less Operation
- PCAP Multi Touch

Octopus — Beamforming Microphone

- 8 channels Microphone Array
- Far-field Voice Capture
- Optimized for Navigational Bridge

Automatic Speech Recognition

- Optimized for Maritime Phrases
- Multi English Accents Supported

Specifications

General

CPU:	Intel® Processor 2.42 GHz (4 Cores / 4 Threads)
Chipset:	Intel® processor Core, Graphics, Memory Controller, and I/O interface in a single system-on-chip (SOC) solution
Memory:	1 x SODIMM sockets with 8 GB DDR3L 1600MHz mounted
Hard Disk Drive:	80GB Intel® S3500 SSD SATA
Microphone:	8 channels microphone array with 16 digital MEMS microphones
Video:	Intel® HD Graphics controller on-CPU
External Video out:	1 x DVI-I video output connector
Buzzer:	Built-in Buzzer (75-85 dB(A) / 1m)
Ethernet:	4 x 10/100/1000 Mbits/s Ethernet LAN on-board, (RJ45) with auto-negotiate
USB:	2 x USB 2.0 (max 0,5 Amp per USB, max 5 Watt total)
COM:	1 x R422
Microphone:	Micro USB
OS:	Windows 10

Front

Display size:	7 inch LCD (TFT), IPS technology
Resolution:	800 x 480
Active area:	152 x 91 mm
View angle:	89° (T/B), 89° (L/R) (typical)
Luminance:	450 Cd/m^2 (typical) *Ambient light sensor*
Contrast ratio:	800:1 (typical)
Touch:	PCAP multi touch (internal USB interface)
Front glass:	Anti Reflection
Protection:	IP56 (from front, when mounted) IP22 (from rear)

Power

Standard:	18-31VDC Dual Galvanic isolated
Power Consumption:	P_{typ} = 10 Watt, P_{max} = 15 Watt
Microphone:	USB powered - 5V DC from Micro USB

Environmental

Operating Temperature:	-15 to +55 °C
Storage Temperature:	-25 to +70 °C
Relative Humidity:	8 to 95 % (non-condensing)

Approvals

Marine:	IACS E10 Rev. 6, IEC 60945 Ed. 4 & CE
Certificates:	Marine MR certificate

Dimensions

Size Panel PC:	218mm (W) x 147mm (H) x 65.2mm (Depth behind bezel) Drop in
Size Microphone:	98mm (Diameter) x 31mm(H) Ceiling mounted
Weight:	App. 2 kg.
Optional accessories:	Desk/ceiling-and wall-bracket (VESA 75x75mm), NMEA 0183 Multiplexer

Technical specifications are subject to change without prior notice.
For drawing and full technical specifications please consult the
users manual.

ELNAV

Advanced Safety Systems

Address:	ELNAV
	Ulica Antuna Gustava Matoša 56
	21000 Split, CROATIA
	Tel. +385 21 740 208
	Mob. +385 91 443 3348
	Email: **info@elnav.ai**
	Web: **www.elnav.ai**