



ELEKTRO DENİZ

Navigation & Communication Solutions

ADVANCED NAVIGATION SOLUTIONS



EDEL-EMES60

Combined Echo Sounder & Speed Log System

Introduction

ELEKTRO DENIZ, founded in 1975 in Tophane, Istanbul, is a well- established company operating in sales, production ,service and new-building projects within the field of marine navigation and communication electronics.

As the official distributor of many globally recognized brands, we have successfully completed numerous commercial and military projects both in Turkiye and abroad.

ELEKTRO DENIZ is ISO 9001:2015 , ISO 14001 :2015, ISO IEC 27001:2022 , ISO 45001:2018 certified.

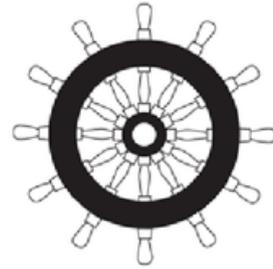
ELEKTRO DENIZ, offers innovative navigational solution EDEL-EMES60 Combined Echo Sounder and Speed Log System. This advance device transmits both speed log and echo sounder data simultaneously using a single sensor, providing easy installation and increasing operational efficiency.

All EDEL-EMES60 navigational product range are IMO Wheelmarked.

Product Certificates;

MED-B

MED-D



EDEL-EMES60 Combined Echo Sounder & Speed Log system

EDEL EMES60, a state-of-the-art navigation system by Elektro Deniz, offering unmatched versatility by combining an echosounder and an electromagnetic (EM) speedlog in a single, integrated unit.



IMO Compliant
One Transducer, Two Devices
Module B and D type approved
Minimizing the risk of the mechanical damage
Simplify installations and maintenance



EDEL EMES60 apart is its configurable architecture, designed to meet diverse operational needs. It can be configured ;

1. Combined System (EDEL-EMES60)

- Echo Sounder and Speed Log functions in one integrated unit

2. Echo Sounder Only (EDEL-EMES60-ES)

- Depth detection with a single 120kHz transducer

3. Speed Log Only (EDEL-EMES60-SL)

- Electro Magnetic Dual Axis Speed Log (STW)

EDEL-EMES60 Benefits & Highlights

Key Benefits:

Two systems in one – Echo Sounder + Speed Log with one sensor

Easy installation & maintenance – fewer parts, less downtime

IMO Wheelmarked & fully compliant – trusted for global fleets

Cost saving – reduced equipment, wiring, and spare parts

Flexible configuration – use as Echo Sounder, Speed Log, or both



⚙️ System Highlights

- Dual Functionality: Depth + Speed Through Water in one compact solution
- High Accuracy:
 - Echo Sounder: 0.05m or 0.5% of depth
 - Speed Log: 0.1kn or 1% of speed
- User-Friendly Interface:
 - 7" color touch screen, day/night modes, multilingual support
- Smart Design:
 - One transducer with gate valve installation → safer, faster, cheaper
- Future Ready:
 - Easy software upgrades via USB/Ethernet

EDEL-EMES60 Combined Echo Sounder & Speed Log System Specifications



Resolution
Operator interface
Communication line
Day/Night modes
Software upgrade means
Supported languages
Calendar, clock
Environmental
Cutout dimensions
Operating T°
Weight
Compass safe distance

Display Unit (separate unit for each sub-system)

800x480, 7" WVGA
Touch screen, tap & swipe operation
RS422, Optional RS232
Full range of backlight adjustment day/night color themes selection.
USB line, USB flash device, Ethernet
English, Norwegian, German, French, Spanish, Russian, Chinese
Real time clock support or GPS time reference.
IP68, front panel only
137x185mm, depth 36mm
-15 - +55° C (storage -20 -+60°C)
0.7kg
Standard : 65 cm, Steering 40cm



External communication line
Analog
Alarm relays
General purpose Input
General purpose Output
Software upgrade means
Environmental
Operating T°
Dimensions, mm
Weight

Interface Unit (separate PCB for each sub-system)

NMEA0183 rev4, /IEC 61162-1/ 3inputs/3 outputs,
1 output, 10Vpp or 4-20mA, fully programmable
2 Mechanical relays, one dedicated system power failure alarm
2 digital inputs (for synchronization, slave mode), fully programmable
2 optocoupler outputs, fully programmable
USB line, USB flash device, Ethernet
IP55
-15-+60°
150x300x120
4kg



Cable length
Communication link
Environmental
Operating T°
Sensor Dimensions
Weight (with cable)

Dual Sensor with Cable

40m (optional 40m)
IEC 61162-1/2
IP68, 6 bar continuous immersion in water
-5-+60°
H = 124mm, D = 60.2mm
7kg



Hull type
Body material
Pressure rating
Operating T°
Weight

Hull fitting unit (ball valve)

Single and double
Stainless steel
10 bar
-5-+60°
18kg

EDEL-EMES60 Combined Echo Sounder & Speed Log System Specifications

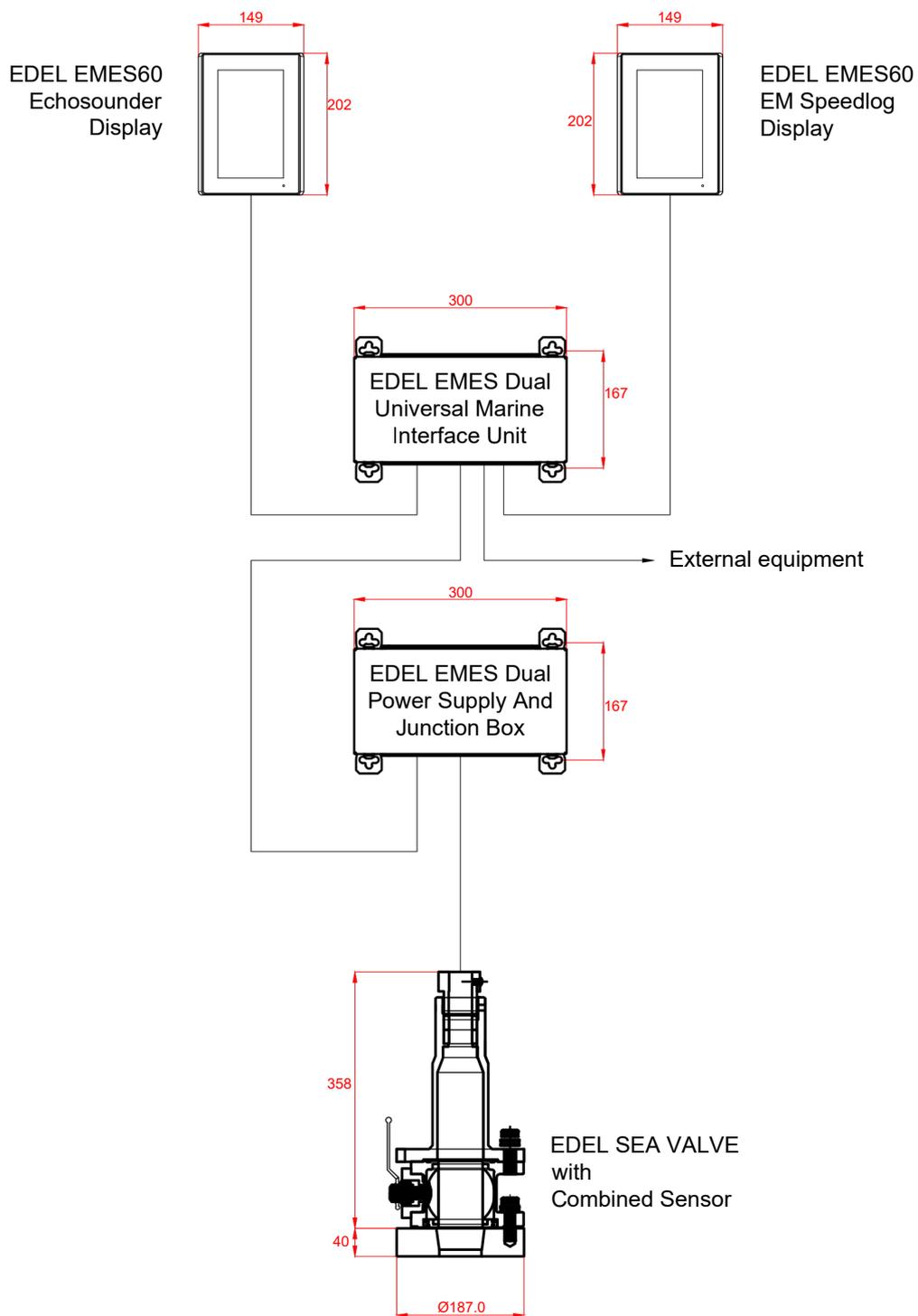
Accuracy	Performance Echosounder 0.05m or 0.5% of depth, whatever is greater
Resolution digital out	0.01m
Resolution screen presentation	Depth < 100m : 0.1m Depth >=100m : 1.0m
Range of measured values	0.7m-400m
Range	user adjustable: 0-10m to 0-500m, auto
Presentation units	meters, feet, fathoms
Alarms and limits	Shallow and deep alarms adjustable alarms



Accuracy	Performance Speedlog 0.1kn or 1% of speed, whatever is greater
Resolution digital out	0.01knots
Resolution screen presentation	0.1knots
Range of measured values	+/- 60 knots on all axis, depending on the hull installation conditions
Temperature Accuracy	Temperature sensor accurate to 1° C
Range	-5 /+40 knots, +/-5 knots
Presentation units	knots, mi/h
Alarms and limits	Low and high speed limits

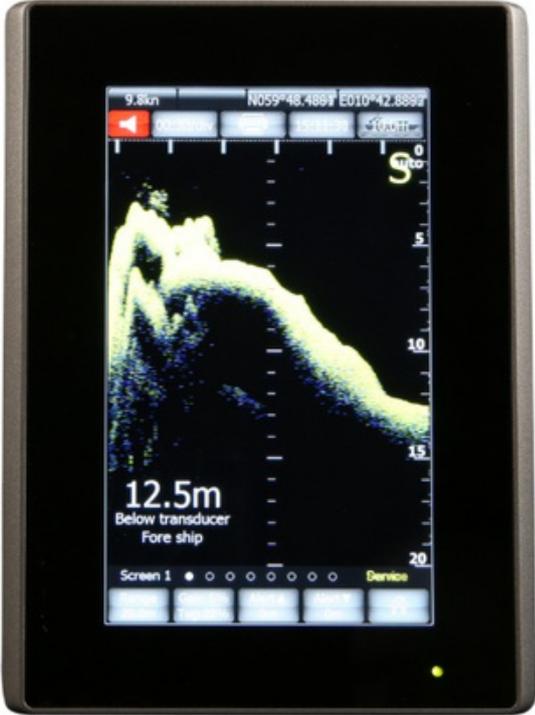


EDEL-EMES60 Combined Echo Sounder & Speed Log System Structure



EDEL-EMES60-ES Echo Sounder

The ELEKTRO DENIZ EDEL-EMES60-ES Echosounder solution ensures high reliability and low costs as there is only one sensor with gate valve. Furthermore, using latest state technology enables depth detection of vessel.



Features and Benefits

Navigational Echosounder 120Khz transducer for shallow and deep water within the SOLAS limits

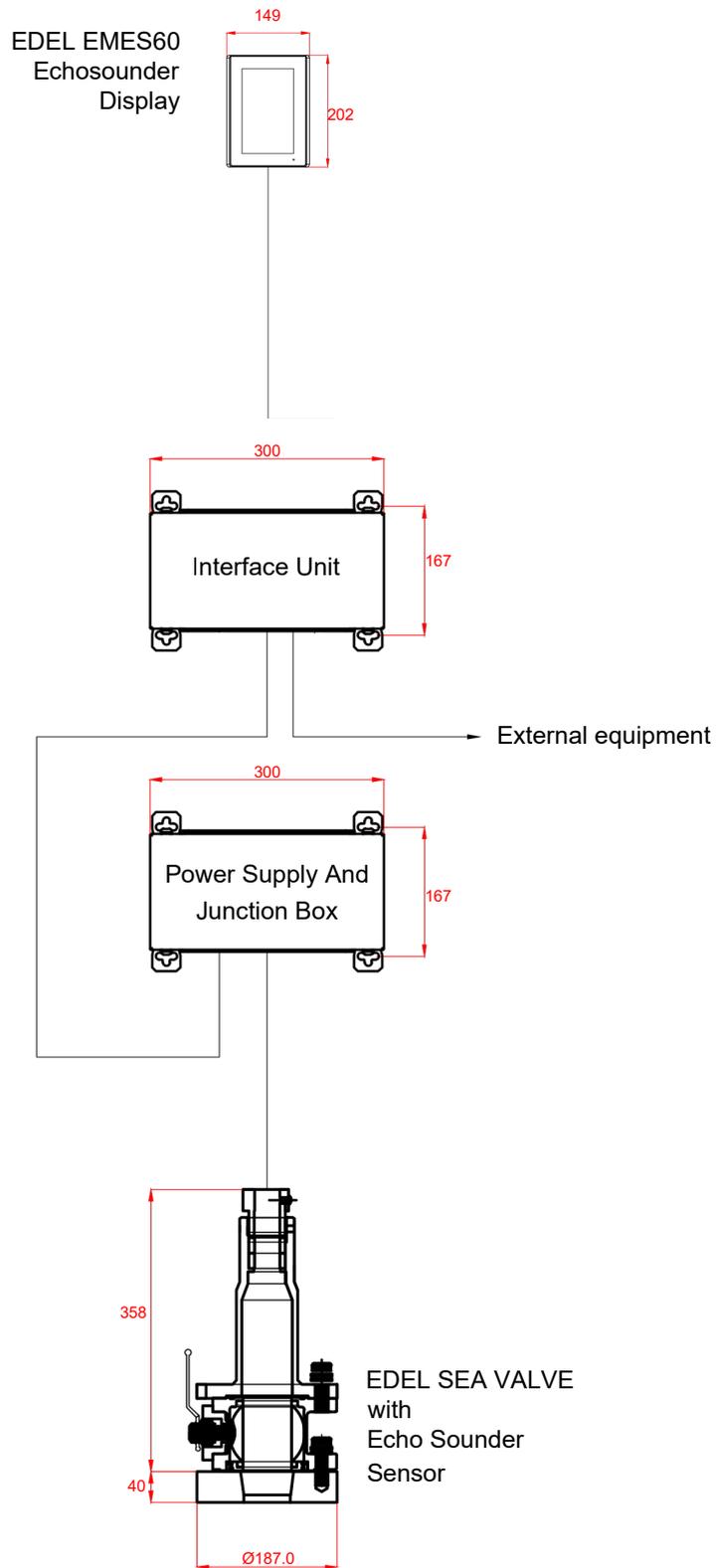
One sensor for Echosounder

Sea Valve Installation

Color 7" touch screen Displays

Depth Range 0.7 to 400m

EDEL-EMES60-ES Echo Sounder System Structure



EDEL-EMES60 -SL Electromagnetic Speed Log

The ELEKTRO DENIZ EDEL-EMES60-SL Electro Magnetic Dual AXIS Speed log solution ensures high reliability and low costs as there is only one sensor with gate valve. Furthermore, using latest state technology enables speed detection of vessel.



Features and Benefits

One sensor for Electro Magnetic Dual Axis Speed log

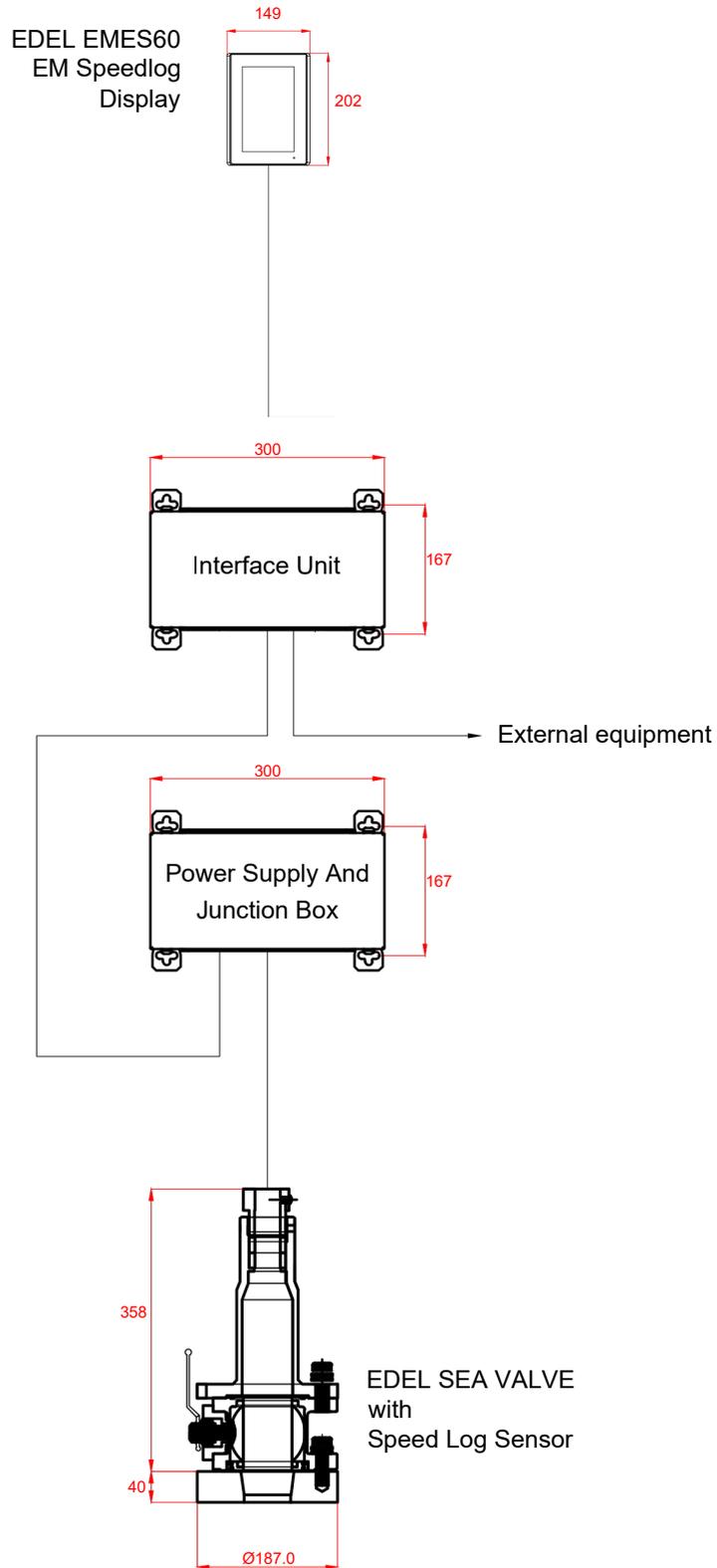
STW (speed through water)

Sea Valve Installation

Color 7" touch screen Displays

Speed range -5 to +40 knots

EDEL-EMES60-SL Electromagnetic Speed Log Structure





- COMPANIES WE REPRESENT -



ELEKTRO DENİZ

Navigation & Communication Solutions

ELEKTRODENİZ DIŞ.TİC LTD. ŞTİ.

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