

# ZNS-890 NMEA-AIS Simulator

## Introduction

**ZNS-890 NMEA-AIS Simulator** is a high-performance simulator which consist of NMEA simulator software and Serial output hardware, and optionally AIS simulator software.

NMEA simulator software generates NMEA-0183 virtual data for ship devices and NMEA sensors, either separately or as an integrated ship.

AIS simulator is for AIS data for up to 10 class A vessels. In addition, a Base station including up to 7 VTS targets, a SAR Aircraft, a class B vessel, an Aid to Navigation, an AIS-SART and a Long-range vessel might be simulated.

Serial output device is very high performance and has 9 NMEA-0183 output ports.

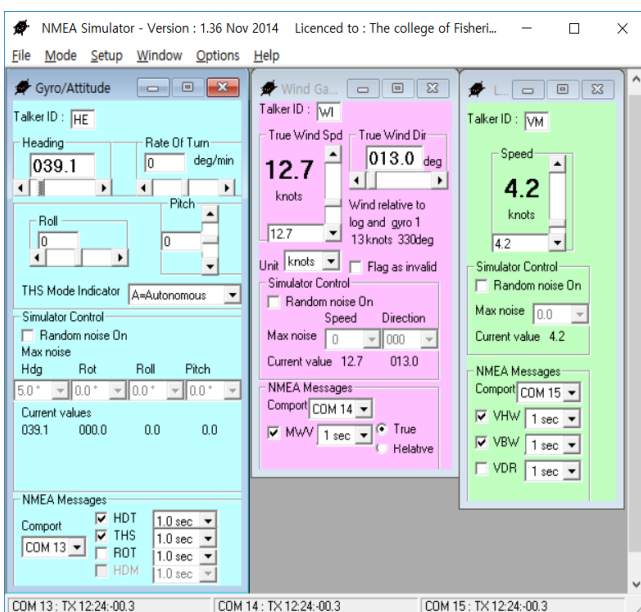
## Features

### 1. Features

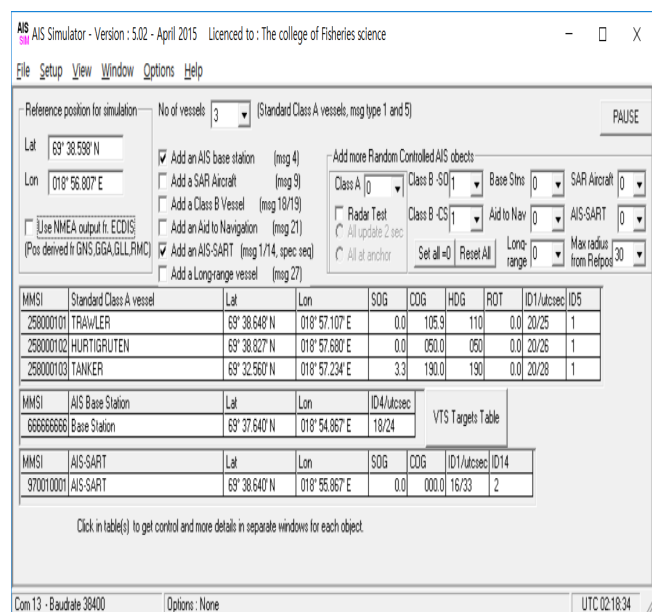
- Data output on serial port, Real or Virtual
- All sensors are controlled independently, or are controlled by ship movements
- Using for testing NMEA-0183 devices, and training in Maritime education
- Using for testing and/or demonstration of AIS presentation on ECDIS/Radar display

### 2. System Configuration

- 1) NMEA Simulator Software
- 2) NMEA-0183 Serial Output Device (ZMG-390 9ch Serial/NMEA Ethernet Gateway)
- 3) AIS Simulator Software (Optional)



**NMEA Simulator**



**AIS Simulator**

## ■ Specification

### 1. NMEA Simulator Software

GPS 1/2	- GGA / GNS / GLL / RMC/ VTG / GSA / GSV / GST / DTM / ZDA
Gyro 1/2	- THS / HDT / ROT / PRATT / PRDID
Speed Log	- VHW / VBW / VDR
Echo Sounder	- DBT / DPT
Wind Sensor	- MWV
ARPA Radar	- TTM / TTD / TLB

### 2. AIS Simulator Software

User	- Up to 10 users control standard Class A vessels
Targets	- Base station includes up to 7 VTS targets - A SAR Aircraft, a Class B vessel - Aid to Navigation, an AIS-SART and a long-range vessel
Control	- Random control of AIS objects

### 3. Serial Output Device (ZMG-390 9ch Serial/NMEA Gateway)

#### 1) Serial Ports

9ch Serial Ports	- 9 Tx Channels, RS422 Output (NMEA-0183) - 2ch Tx for Galvanic isolation
Baud Rate	- 1,200bps ~ 230,400bps by each port (9 steps)
Configuration	- Baud Rate, Data Length, Parity bit and Stop bit by each channel

#### 2) Ethernet

Protocol	- TCP/IP UDP Unicast and Multicast - IEC61162-450 Light Weight Ethernet Protocol (Pro only) - TCP/IP TCP and HTTP for System configuration
Speed	- 10/100Mbps

#### 3) Input Power

Voltage / Fuse	- DC 12/24V (10 ~ 32V), Approximately 400mA at 12V - Electric Fuse, No Replacement required
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#### 4) Physical Specifications

Dimension / Weight	- 207 x 130 x 500 mm (Including Terminal Blocks) / 0.5kg
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#### ■ Remark

- 1) If you need any other specifications, please contact us.
- 2) Customizing is available for user requirements.
- 3) The specifications may be changed without any notifications.