

# Universal Automatic Identification System

## AIS-50A

- ◆ The First in the World !!!
- ◆ AIS built-in Color Electronic Chart...
- ◆ Built-in Worldwide Port Map !!!
- ◆ AIS Data Interfacing with all Kinds of GPS Plotter !!!

**NEW**



**AIS-50A**



## FEATURES

- ▶ Class-A Universal AIS Complying with IMO MSC. 74(69) Annex3, IEC 61993-2, ITU-R M.1371-3, ITU-R M.493-13, ITU-R M.825(DSC), IEC-60945, IEC-61162-1/2.
- ▶ Displaying navigational data based on Dynamic / Static data.
- ▶ Completely compatible with all system using NMEA standard.
- ▶ Edition of user message on navigation & ship securities is available.
- ▶ GLONASS/GPS function available receiving Signal from Russian Satellite.
- ▶ Interfaces with RADAR, ECDIS, GYRO COMPASS, and external GPS, etc.
- ▶ Easy identification on other ship's status by providing electronic chart data.
- ▶ System self-restoring function enhances stability.
- ▶ Adopted user-friendly one touch keypad.

## SPECIFICATIONS

### General

- Power Consumption: 50W peak / 10W average(Main Unit)
- Power supply : 12V DC -10% +30%(DC10.8V~15.6V)
- Power supply (SP-580AD) : 24V DC -10% +30% / 110V AC / 220V AC
- Default Frequencies : AIS1 (CH 87B) : 161.975 MHz  
AIS2 (CH 88B) : 162.025 MHz  
DSC (CH70) : 156.525 MHz
- Frequency range : 156.025 ~ 162.025 MHz
- Transponder size/weight : 221 x 165 x 95 mm, 1.5 kg
- MKD Display : 5.6" Color TFT LCD
- MKD size/weight : 255 x 162 x 75 mm, 0.9 kg
- GPS size/weight: 90 x Ø65mm (+140mm mounting bar) 0.2kg

### AIS Transmitter

- Power output : 12.5W or 1.0W(41dBm ±1.5 dB or 30dBm ±1.5 dB)
- Antenna impedance : 50 ohms(SO-239)
- Channel spacing : 25kHz

### AIS Receivers

- Sensitivity : (PER) < 20% at -107 dBm
- Modulation : GMSK
- Data rate : 9600 bits/s
- Frequency stability : < ±1 ppm
- Co-Channel : 10dB
- Adjacent Channel : 70dB
- IMD : 65dB
- Blocking : 84dB

### DSC Receivers

- Sensitivity : BER <10-4 at 107 dBm
- Modulation : FSK (1300 Hz/2100 Hz)

### Serial inputs/outputs

- SENS1/2/3/4 : IEC61162-1/2 (input only)
- LONG/AUX/PILOT/RTCM : IEC61162-1/2 (input & output)
- Display : RS422 non-isolated

### GPS Antenna & Receiver

- Antenna : PATCH ANTENNA / TNC (RG-58U)
- Receiver Type : 16channel, L1 frequency, C/A code
- Accuracy : Acquisition -140 dBm / Tracking -150 dBm

### Environment

- Operation temperature : -15°C to +55°C
- Storage temperature : -25°C to +75°C
- Vibration : IEC 60945

## COMPONENTS

### Standard

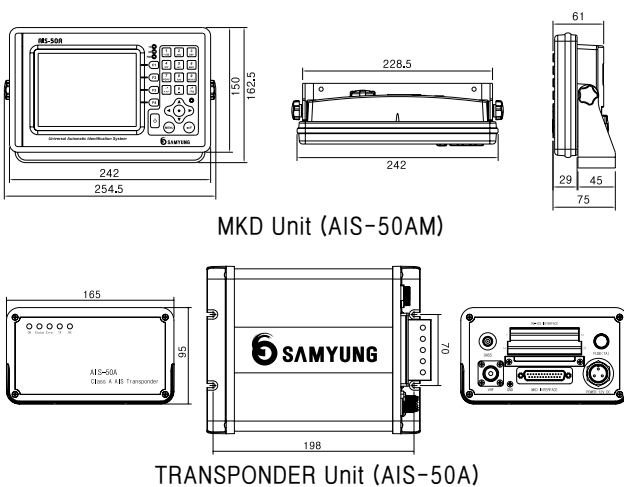
- Transponder Unit(AIS-50A)
- MKD Unit(AIS-50AM)
- GPS & VHF Antenna
- Installation Materials/Spare Parts
- Instruction Manual

### Option

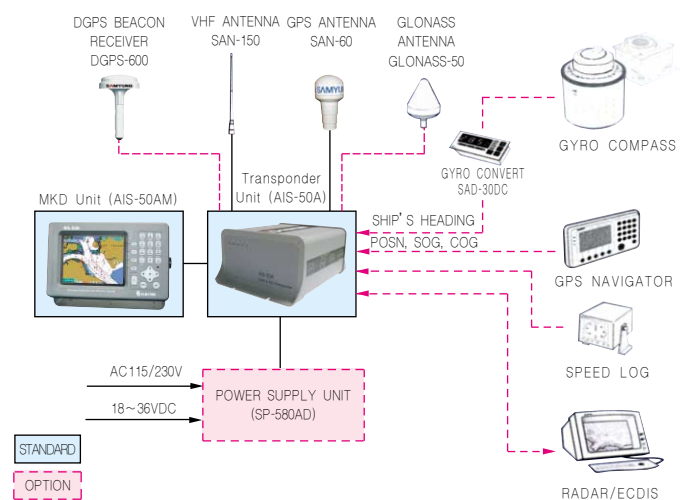
- DGPS Receiver
- GLONASS Module & Antenna(GLONASS-50)
- Power Supply(SP-580AD)
- GYRO Converter(SAD-30DC)

## DIMENSIONS

### UAIS(Universal Automatic Identification System) AIS-50A



## CONFIGURATION



\* Specification is subject to change without pre-notice