

HS-MX1209GT

Ultra Small Size & Lowest Power AIS Receiver Module
Rx Sensitivity down to -112dBm @ 20% PER
BUILT-IN GNSS RECEIVER



- Integrates two-channel high performance AIS receiver
- Based on low-cost, low-power and high-performance SDR solutions
- Good receiver sensitivity down to -112dBm @ 20% PER
- Automatically receiving and processing of all AIS message from Class B, Class A base station, Airborne, AtoN, AIS SART, AIS MOB and EPRIB with AIS
- Can receiving then decoding position, heading, speed and other information according to the standard format of AIS message
- Built-in 50 channel GNSS receiver
- Comply with IEC60945, IEC62287-1 & 2, IEC62320-2, ITU-R M1371-5 standards
- Ultra compact size (44mm x 38mm x 5mm)
- Suitable for general shipborne AIS navigator, compact AIS black boxes, AIS beacon lights, AtoN, UAVs, USVs, smart fishing grounds, offshore wind turbines and bridge collision warning systems.



BRIEF INTRODUCTION

HS-MX1209GT is an ultra small size & high performance AIS(Automatic Identification System) receiver based on low cost SDR technology to meet the market demands of next-generation ships and shore-based maritime communication networks, providing important and effective navigation assistance and communication method for ship pilots and shore-based management. One of the features to highlight of this AIS receiver is it supports good receiver sensitivity up to -115dBm and built-in GNSS receiver.

SAFETY

AIS improves safety on water through enhanced navigation awareness and reduces time of Search & Rescue.

SECURITY

AIS helps to identify and track vessels and improve border security by transmitting precise navigation data.

VESSEL MONITORING SYSTEM

AIS enables automatic control and intruder or vessel movement alerts within designated areas.

VESSEL TRAFFIC MANAGEMENT

AIS enables port traffic management by using precise tracking and identification data.

SPECIFICATIONS

Power Supply: 3.5 to 6VDC
Power Consumption: Rx current at 150mA @ 3.7VDC
IEC 61108-1 compliant
Data Interface: TTL, NMEA0183 format
IEC61162-1: NMEA0183 input & output, 38400bps
VHF Receiver: receiver x 2
GNSS Receiver: Built-in 50 channel GPS/Galileo/Beidou(Optional)
Operation Frequency: 156.025 to 162.025MHz in 25KHz
Receiver Sensitivity: -112dBm @ 20% PER
LED indicators for power and receiver
IEC60945 compliant
Operating Temperature: -30°C to +70°C
Standards and Approvals
ITU-R M.1371-5
IEC62287-1 & 2
IEC60945 Edition 4
IEC61162-1/2 Edition 2
IEC61108-1

SUPPLIED WITH

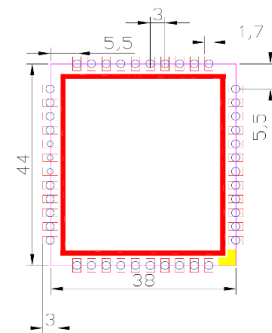
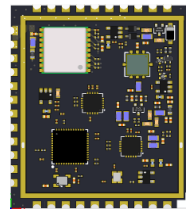
Datasheet and user manual
AIS Antenna (Optional)

KEY FEATURES

High Rx sensitivity up to -112dBm
Support low voltage 3.5~6VDC
Ultra small size 44mm x 38mm x 5mm

DIMENSIONS

44mm x 38mm x 5mm



WEIGHT

20g

TYPICAL APPLICATIONS

AIS receiver black box
Compact AIS base station
AIS beacon light
AtoN and virtual AtoN
UAVs and USVs
Satellite AIS IoT
Marine Fixed & Portable VHF Radio
MDA & MSA
VTS & VMS system

Specifications subject to change without notice Rev1.2: April 2026

Tel: +86 18066726340

Email: sales@haisitek.com