ONWA®
MARINE ELECTRONICS

MODEL

KS-200A

Class B+ AIS Transponder
Black Box

MODEL

KS-200A_SART

Class B+ AIS Transponder
Black Box with SART button

AIS Technology

exactTrax™

exactTrax TRACKING SERVICE

CLASS B+

Built-in AIS Transponder

RS232
Electrical Interface
and Programming

NMEA0183
Interface

AIS TECHNOLOGY AND ONWA AIS SOFTWARE

AIS TECHNOLOGY

The ONWA Class B+ AIS Transponder transmits and receives all AIS data of nearby targets around your boat *(with suitable VHF Antenna)*

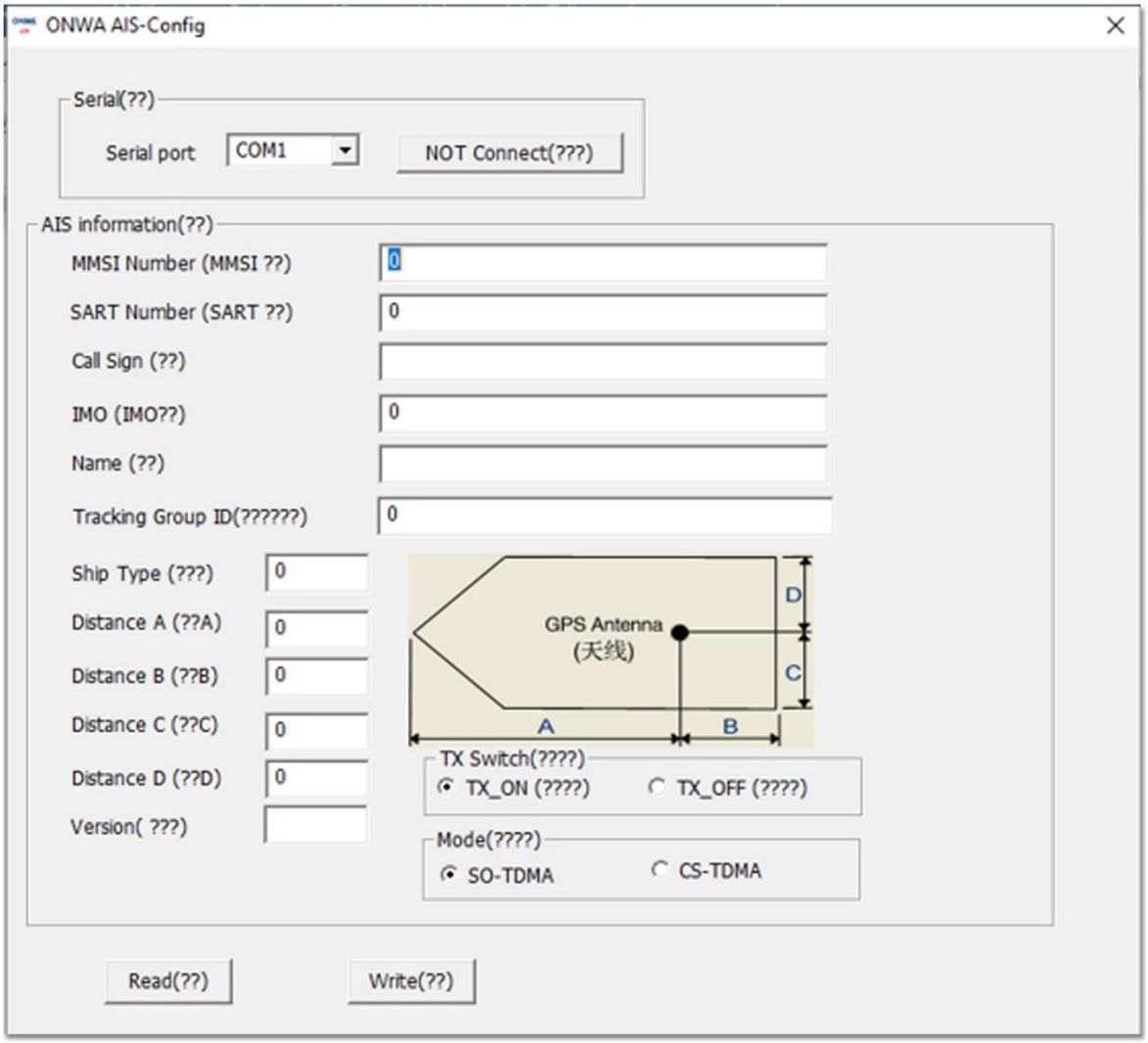
CLASS B+

Class B+ AIS Technology

- **SOTDMA Technology** - Same technology used by Class A
  - Guaranteed time slot allocation
- **5W Transmission Power** - increases the range and AIS Satellite reception enabling Global tracking
- **Increased Transmission Rate** (Based on speed)

ONWA AIS SOFTWARE

AIS data of your vessel such as MMSI, Call Sign, Vessel name, etc. can be configured with the ONNWA AIS Software



exactTrax™

exactTrax Tracking

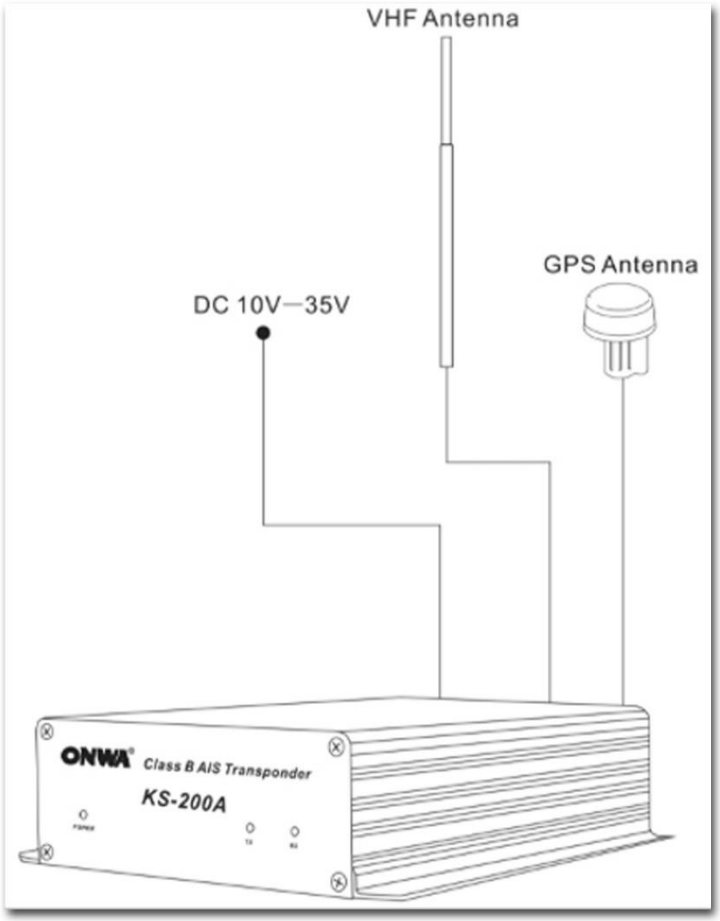
**Specify when ordering*

- Track fishing boats and small commercial vessels with AIS Class B type transceivers across the globe
- Can send standard AIS message and exactTrax message (exactTrax message shows MMSI and position only)
- ONWA AIS can connect other sensors to the AIS module, such as ultrasonic weather sensor and speed log, to send with exactTrax message

NOTE: *In order to use exactTrax, user must avail ExactEarth Service*

ExactTrax showing position of a vessel sailing for 1 week from Hong kong to Malaysia in multi-hour vessel track

SYSTEM CONFIGURATION



**Suitable VHF Antenna*

- **KA-159**

(not included in the set, specify when ordering)

**GPS Antenna*

- **KA-07**

(not included in the set, specify when ordering)

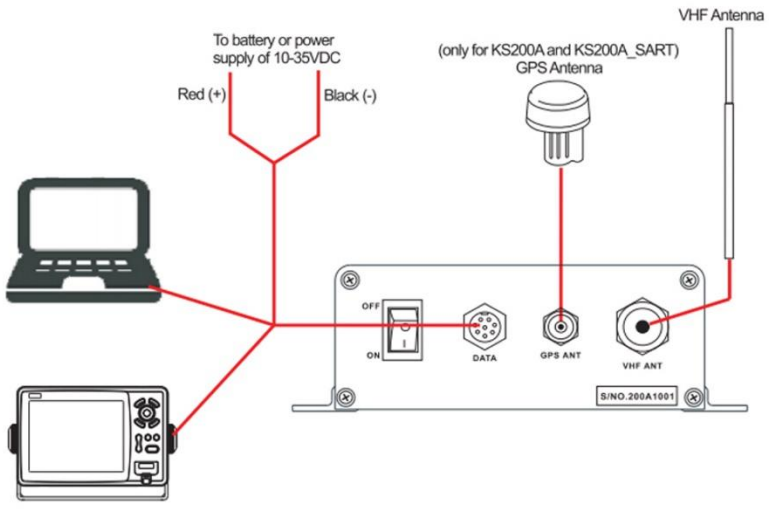
SPECIFICATIONS

GPS Receiver (AIS Internal)	IEC 61108-1 compliant
Connectors	VHF Antenna connector PL259 female GPS Antenna connector BNC female Power/data connector 8 pins male
PHYSICAL	
Dimension:	207mm (length) x 155.8mm (width) x 50mm (height)
Weight:	0.8kg
POWER	
Input:	10~35VDC
Power Consumption:	0,35A nominal, 2A peak
Electrical Interface	RS232 38.4kbaud bi-directional
Environmental	IEC 60945 (Cat C)
Operating Temperature:	-25°C to +55°C
NMEA Sentence Supported	VDM, VDO, RMC, GSV, GGA, GSA

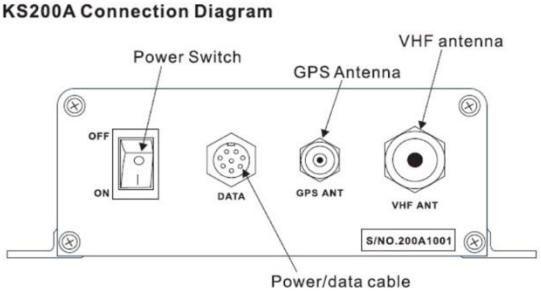
AIS CHARACTERISTICS

Frequency Rate:	156.025 MHz~162.025 MHz	AIS Channel 1:	CH 87B (161.975 MHz)
		AIS Channel 2:	CH 88B (162.025 MHz)
Access Scheme:	SOTDMA	Tx Power Output:	> 5 Watt (37 dBm ± 1.5 dB)
Channel Bandwidth:	25 KHz	RX Sensitivity:	< -123dBm @ 20% PER
Modulation:	GMSK	RX Message Format:	AIS Class A and B messages
Data Rate:	9,600 bps		
Number of AIS Transmitter:	1	Comply Standard:	IEC-62287 IEC 62287-2 Ed. 2.0:2017
Number of AIS Receiver:	2		

Interconnection diagram



KS200A Connection Diagram



DIMENSION