

SANDEMARINE **PRODUCTS** BROCHURE

COMPANY PROFILE

Nanjing Sandemarine Information Technology Co., Ltd., established in 2012, is a National High-Tech Enterprise. Built on the research, development, production, and sales of marine communication and navigation equipment, the company provides a wide range of product solutions for leisure vessels, marine fisheries, maritime governance, and maritime transportation.

Sandemarine is renowned in the industry for its strong R&D capabilities, with over 60 independent patents and participation in the formulation of multiple industry standards for marine electronic equipment. The company has deeply invested in the fields of vessel automation, intelligence, and unmanned systems, launching several pioneering marine electronic products in China. These products cover various areas, including vessel navigation, communication, and coastal radio station construction.

Leveraging forward-looking technology strategies and precise market positioning, sandemarine has demonstrated exceptional market cultivation capabilities. Its products have been deployed across all coastal provinces in China and exported to numerous countries in Southeast Asia, the Middle East, Europe, the Americas, and Africa, serving over 100,000 vessels.

PRODUCTS



AP400 Track Autopilot

For Fishing Vessel

AIS Function



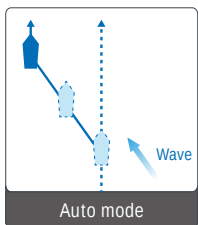
Automatic Mode

Maintains the set heading, but the vessel may drift off course due to the effects of tide and wind.

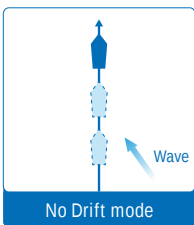


No-Drift Mode

Maintains the set course, not affected by tide and wind.



Auto mode



No Drift mode

Eight Navigation Modes

Navigate to the target with the shortest straight-line distance.

Track NAV

AIS NAV

Cursor NAV

Waypoint NAV

Route NAV

MOB NAV

Lat.&Long. NAV

External Data NAV

AIS Function

Support completed AIS functions

Virtual rudder angle

Equipped with a virtual rudder angle unit, which is easy to install and no need for a physical rudder feedback unit.

AIS Fleet / Buoy Function

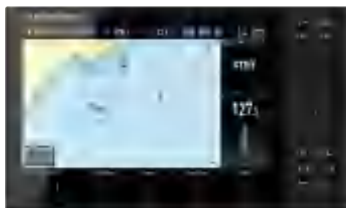
- Quick switching display on the main interface
- Distinguishing display of chart colors and symbols
- Support multiple alarm functions

*The AIS function requires the system to connect AIS device

 Fleet

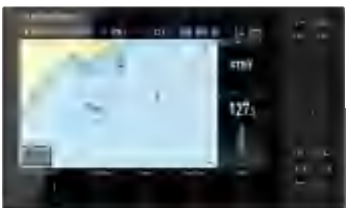
 Buoy

Autopilot Display Unit



AP400

- 10.1 inch display
- Built-in nautical chart function
- 8 navigation modes
- Support AIS function
Requires AIS data input



AP400 AIS

- 10.1 inch display
- Built-in nautical chart function
- 8 navigation modes
- Built-in AIS receiver module
No AIS data connection required



AP300

- 8 inch display
- Built-in nautical chart function
- 7 navigation modes
- Not support AIS function



AP200

- 8 inch display
- Waypoint navigation
- External data navigation

Drive Unit

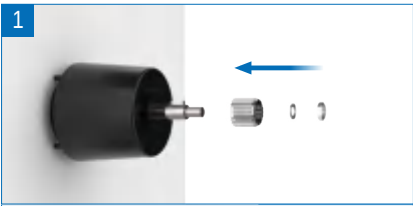
Wheel Pilot Suitable for hydraulic vessels



Quick installation

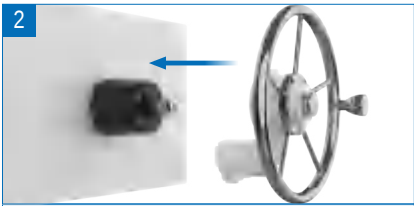
No need to open the wheelhouse, and it can be done in just three steps.

1



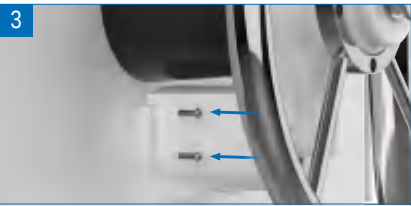
Put the gear sleeve into the extension rod of the steering gear, and aim at the keyway. Fix the gear sleeve tightly with the original nut and flat washer.

2



Put the wheel pilot into the the gear sleeve.

3



Fix the wheel pilot to the driver's console panel using four screws



Safe Steering®

The Safe Steering function temporarily switches the autopilot to standby mode out of an automatic steering mode (Auto mode, No drift mode, Navigation mode)



Precise steering control

The steering accuracy: $\pm 0.1^\circ$



SWA18

Suitable for hydraulic yacht



SWA20

Suitable for hydraulic boat

Solenoid Valve Controller Suitable for solenoid valve vessels



Precise steering control

The steering accuracy: $\pm 0.1^\circ$



Virtual rudder angle

Eliminates the hassle of installing a rudder angle feedback unit and running wires.



SSC12

Other Units



SGC18/SGC16

Compass Antenna
SGC18:15m cable, SGC16:6m cable



High-precision positioning data and heading

High-precision gyro and positioning module.
Heading accuracy: $\leq 1^\circ$; Resolution: 0.1° .



Auto-Calibration

Ensures more precise data.



WR18

Wireless Bluetooth Remote



SR24

Follow-up Remote Controller



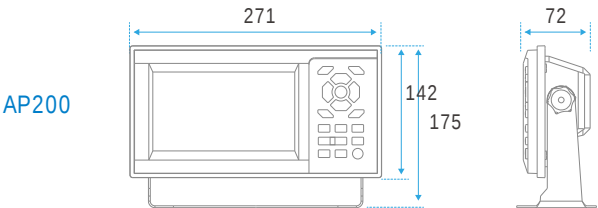
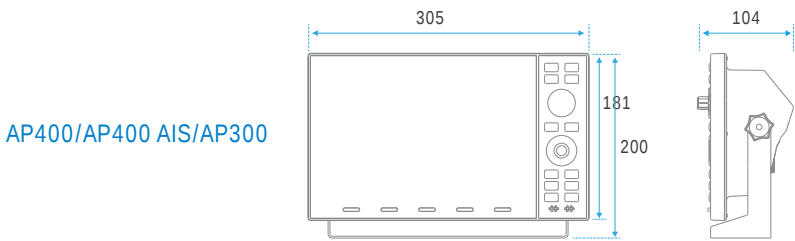
AF1003

Rudder angle feedback unit

Display Unit	AP200
Screen	7 inch
Displayable area	153.8×85.6mm
Brightness	400 ints (Max)
Pixel	800×480
Environment	
Temperature	-15℃~55℃
Waterproof	IP65
Power	
Power supply	9-36V DC
Installation	
Installation	Desktop installation, Hanging installation, Embedded installation
Port	
NMEA 0183	Data port(RS422): Positioning data, heading, rudder angle, external navigation data input Positioning data, heading, rudder angle output Compass port(RS422): Positioning data, heading input
Function	
Steering mode	STBY, AUTO, FU, No-drift (ND), NAV
Navigation mode	Waypoint NAV, External navigation
Vessel type	Hydraulic-driven boat, Chain-driven boat, Solenoid valve boat, Hydraulic-driven yacht

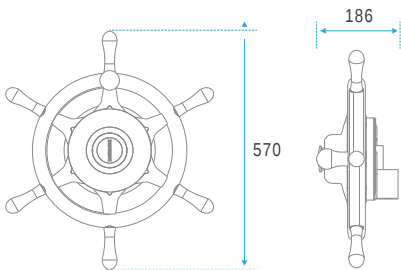
www.sandemarine.com

Display Unit	AP300	AP400	AP400 AIS
Screen	8 inch	10 inch	
Displayable area	184.1×114.6mm	217.0 ×135.6mm	
Brightness	400 ints (Max)	800 ints (Max)	
Pixel	1280×800	1280×800	
Environment			
Temperature	-15℃~55℃		
Waterproof	IP65		
Power			
Power supply	9-36V DC		
Installation			
Installation	Desktop installation, Hanging installation, Embedded installation		
Port			
NMEA 0183	Data1 port(RS422): Positioning data, heading, rudder angle, external navigation data, AIS data (AP400) input Positioning data, heading, rudder angle output Data2 port(RS422×2): Positioning data, heading, external navigation data, AIS data (AP400) input Positioning data, heading, rudder angle output Compass port(RS422): Positioning data, heading input		
Function			
Steering mode	STBY, AUTO, FU, No-drift (ND), NAV		
Navigation mode	Waypoint NAV, route NAV, track NAV, cursor NAV, Lat.&Long. NAV, MOB NAV, external data NAV AIS NAV (A400/AP400 AIS)		
AIS function	AP300: Not support AIS function AP400: Support AIS data input AP400 AIS: Bulit-in AIS receiver module		
Vessel type	Hydraulic-driven boat, Chain-driven boat, Solenoid valve boat, Hydraulic-driven yacht		
Dimensions			

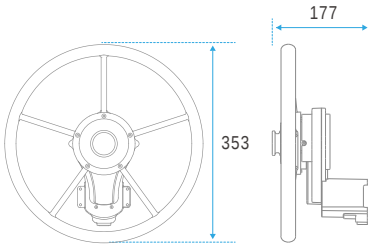


mm

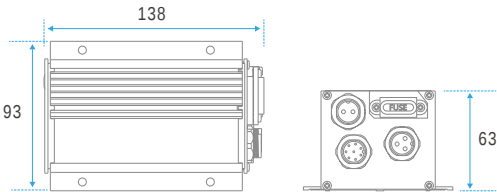
Compass Antenna	SGC16/SGC18		
Sensor type	GNSS positioning module, fluxgate compass, gyroscope		
Accuracy	Accuracy: ±1 ° Heading resolution: 0.1°		
Data Available	NMEA0183: HDG(Heading), RMC(Position, COG & SOG)		
Environment			
Temperature	-15°C~55°C		
Waterproof	IP68		
Power			
Power supply	12V DC (by display unit)		
Installation			
Installation	Pole mount, SGC18:15m cable, SGC16:6m cable		
Drive Unit	SWA18 Wheel Pilot	SWA20 Wheel Pilot	SSC12 Controller
Vessel type	Hydraulic-driven fishing yacht	Hydraulic-driven fishing boat Chain-driven fishing boat	Solenoid valve fishing boat
Composition	Motor, reduction, clutch, wheel		
Motor	Permanent magnet brushless DC motor		
Controller	SMC18 Wheel pilot controller	SMC20 Wheel pilot controller	
Environment			
Temperature	-15°C~55°C		
Waterproof	IP65		
Power			
Power supply	12/24V DC (by controller)	24V DC (by controller)	24V DC
Installation			
Installation	Hanging installation		Desktop/ceiling installation
Dimensions			



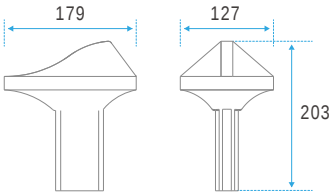
SWA20



SWA18



SSC12



SGC16/SGC18

mm

Silot 5 Yacht Autopilot

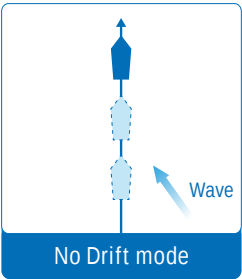
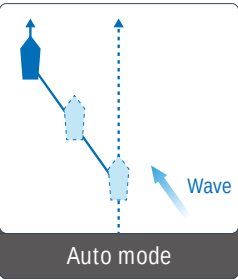
For Yacht

NMEA2000



No-Drift Mode

Driving in a straight line, fearless of wind and waves.



Navigation Mode

You can control the autopilot to navigate to the target point through the chartplotter.

Safe Steering®

The safe steering function can help you steer safely and comfortably. Turning the steering wheel can temporarily switch to STBY mode and automatically return.

Virtual rudder angle

The drive unit is equipped with a virtual rudder angle unit, which is easy to install and no need for a physical rudder feedback unit.

Two display Screens Day and night display mode

Multiple display screens and customizable data box to meet individual customization needs.



Autopilot Mode



Auto mode

Maintains the set heading, but the vessel may drift off course due to the effects of tide and wind.



No-Drift mode

Maintains the set course, not affected by tide and wind.



Navigation mode

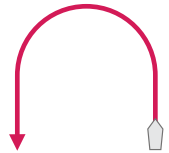
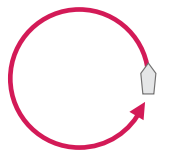
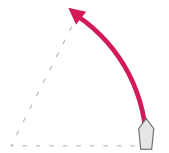
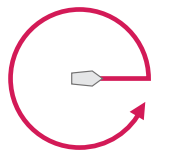
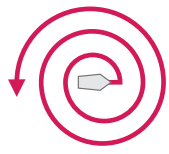
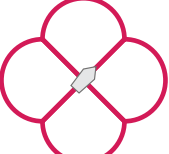
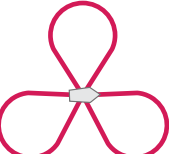
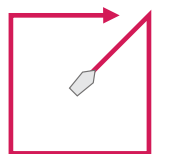
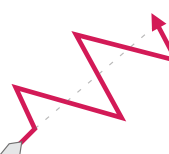
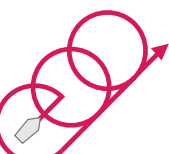
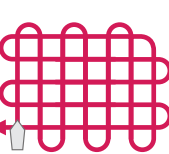
Maintains the set heading, but the vessel may drift off course due to the effects of tide and wind.



Follow-up / NFU mode

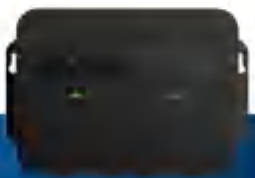
Driving a ship by setting the rudder angle/ direction.

Turn Mode

U Turn 	Circle 	Angle 	Orbit 
Spiral 	Figure 8 	Cloverleaf 	Square 
Zigzag 	S turn 	Circle against 	Search 

Units

AC 1 Control Unit



The AC1 autopilot control unit is the centre of the sandemarine autopilot system, compatible with the yacht's drive unit and solenoid valve.

- Support NMEA2000
- Support the transmission of NMEA0183 data

EC 3/EC 3 Pro Compass



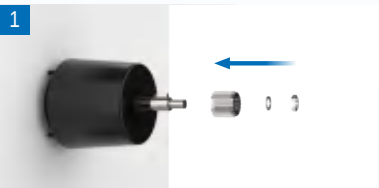
Built in high-precision gyroscope and reliable solid-state sensing technology.
Heading accuracy: $\leq 1^\circ$; Resolution: 0.1° .

- Support NMEA2000
- High precision positioning (EC 3 Pro)

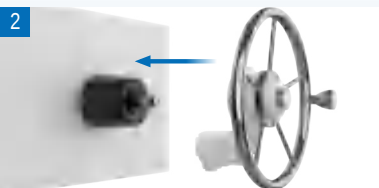
SWA18 Drive Unit



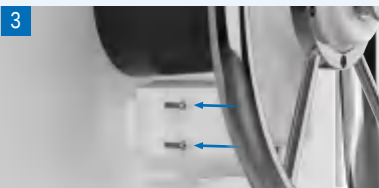
No need to modify hydraulic system,
directly installed



Put the gear sleeve into the extension rod of the steering gear, and aim at the keyway. Fix the gear sleeve tightly with the original nut and flat washer.



Put the drive unit into the the gear sleeve.



Fix the wheel pilot to the driver's console panel using four screws

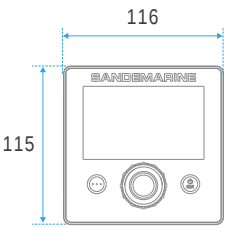
Remote Control

A variety of remote controls to
meet your various needs.

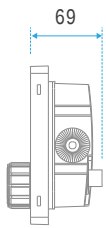
- Wired/Wireless control
- FU/NFU remote control



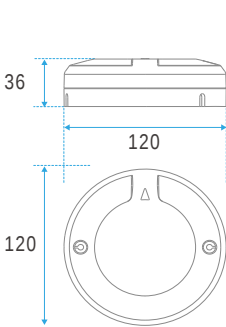
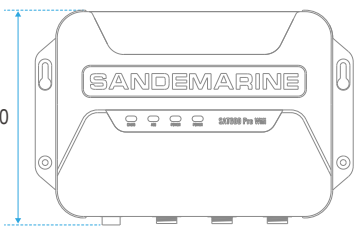
Display / Control Unit		Silot5 + AC1
Screen		4.0" TFT Color LCD
Displayable area		86.40×51.84mm
Brightness		800 ints
Pixel		800×480
Environment		
Temperature		-15℃~55℃
Waterproof		Display unit: IP67 Control unit: IP67
Power		
Display unit		12V DC (10.8V~15.6V)
Control unit		
Port		
Port		Display unit: NMEA2000×1
		Control unit: NMEA2000×1, NMEA0183×1
Input	NMEA2000	059392/059904/060928/126208/126464/126992/126993/126996/127237/127245/127250/127251/127257/127258/128259/128267/128275/129025/129026/129029/129033/129044/129283/129284/130306/130310/130311/130577
	NMEA0183	AAM, APB, BOD, BWC, BWR, DBT, DPT, GGA, GLL, GNS, HDG, HDM, HDT, MTW, MWV, ROT, RMB, RMC, THS TLL, VHW, VTG, VWR, VWT, XTE, ZDA
Output	NMEA2000	059392/059904/060928/126208/126464/126996
	NMEA0183	DBT, DPT, GGA, GLL, GNS, HDG, HDM, HDT, MTW, MWV, RMB, RMC, ROT, RSA, VHW, VTG, VWR, VWT, ZDA
Function		
Steering mode		Auto mode, No drift mode, Navigation mode, Follow-up mode, Non follow-up mode
Turn mode		U Turn, Circle, Angle, Orbit, Spiral, Figure 8, Cloverleaf, Square, Zigzag, S turn, Circle against, Search
Dimensions		



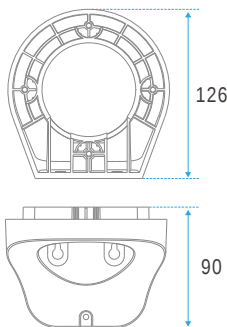
Silot 5



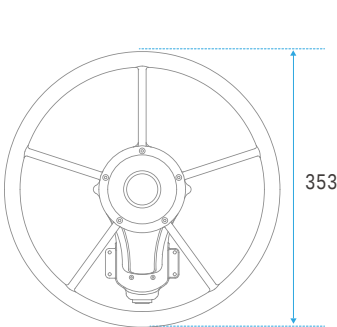
AC 1



EC 3/EC3 Pro



Mounting bracket



SWA18

mm

Solar AIS Buoy

Light beacon Unlimited endurance*

-  **Solar Energy, Unlimited Endurance**
Long-term using in the sea.
-  **Integrated light beacon**
Built-in highbright LEDs, automatically flashing at night.
-  **Longer communication range**
The best match between RF circuit and antenna ensures the longer communication distance.
-  **Faster and more accurate positioning**
Larger GPS module, precise algorithms, and more accurate positioning.
-  **Battery indicator**
During power on/off, the battery indicator blinks to show the power level, while the precise real-time power level can be viewed on the AIS device.
-  **Fearless of wind and waves, rugged and durable**
IP68 waterproof, reinforced materials.

*With sufficient daily sunlight, the solar buoy can maintain continuous operation without recharging.

Solar AIS Buoy

W220

- Internal antenna
- Range: 10-12nm
- Light module
- Unlimited Endurance
Sufficient sunlight



B750/B750 Ultra

- External antenna
- Range: 16 -18 /20-25 nm
- Light module
- Unlimited Endurance
Sufficient sunlight



W300

- Internal antenna
- Range: 10-12nm
- Light module
- Unlimited Endurance (Larger solar panel)
Well-suited for aquaculture and monitoring



B600 AIS Vessel Locators

- Internal antenna
- Range: 10-12nm
- AIS SOS (MOB)
Slide the SOS key to turn on the AIS MOB mode and send distress messages



Replaceable Battery AIS Buoy



Integrated light beacon
Built-in highbright LEDs, automatically flashing at night.



Faster and more accurate positioning
Larger GPS module, precise algorithms, and more accurate positioning.



Replaceable Battery
It greatly saves the user's replacement time and improves the efficiency.



High-Capacity Battery
The Pro series is equipped with a 4000mAh large-capacity battery, supporting extended operation times.

B500

- Internal antenna
- Range: 10-12nm
- Time: 14 days (2600mAh)

B500 Pro

- Internal antenna
- Range: 10-12nm
- Light module
- Time: 12 days (2600mAh)

B500 Max

- Internal antenna
- Range: 10-12nm
- Time: 25 days (4000mAh)

B500 Pro Max

- Internal antenna
- Range: 10-12nm
- Light module
- Time: 23 days (4000mAh)



Other AIS Buoy and device

W100

- Internal antenna
- Range: 10-12nm
- Time: 14 days (2600mAh)



B700/B700 Ultra

- External antenna
- Range: 14-16/18-20nm
- Time: 14 days (2600mAh)



B100

- Internal antenna
- Range: 8-10nm
- Time: 14 days (2600mAh)



B100 Pro

- Internal antenna, Light module
- Range: 8-10nm
- Time: 14 days (2600mAh)



WR100 AIS Buoy Receiver

- Support AIS mode and encryption mode.
- AIS data is imported to the Chart and radar through the data cable.
- Suitable for all models of buoys



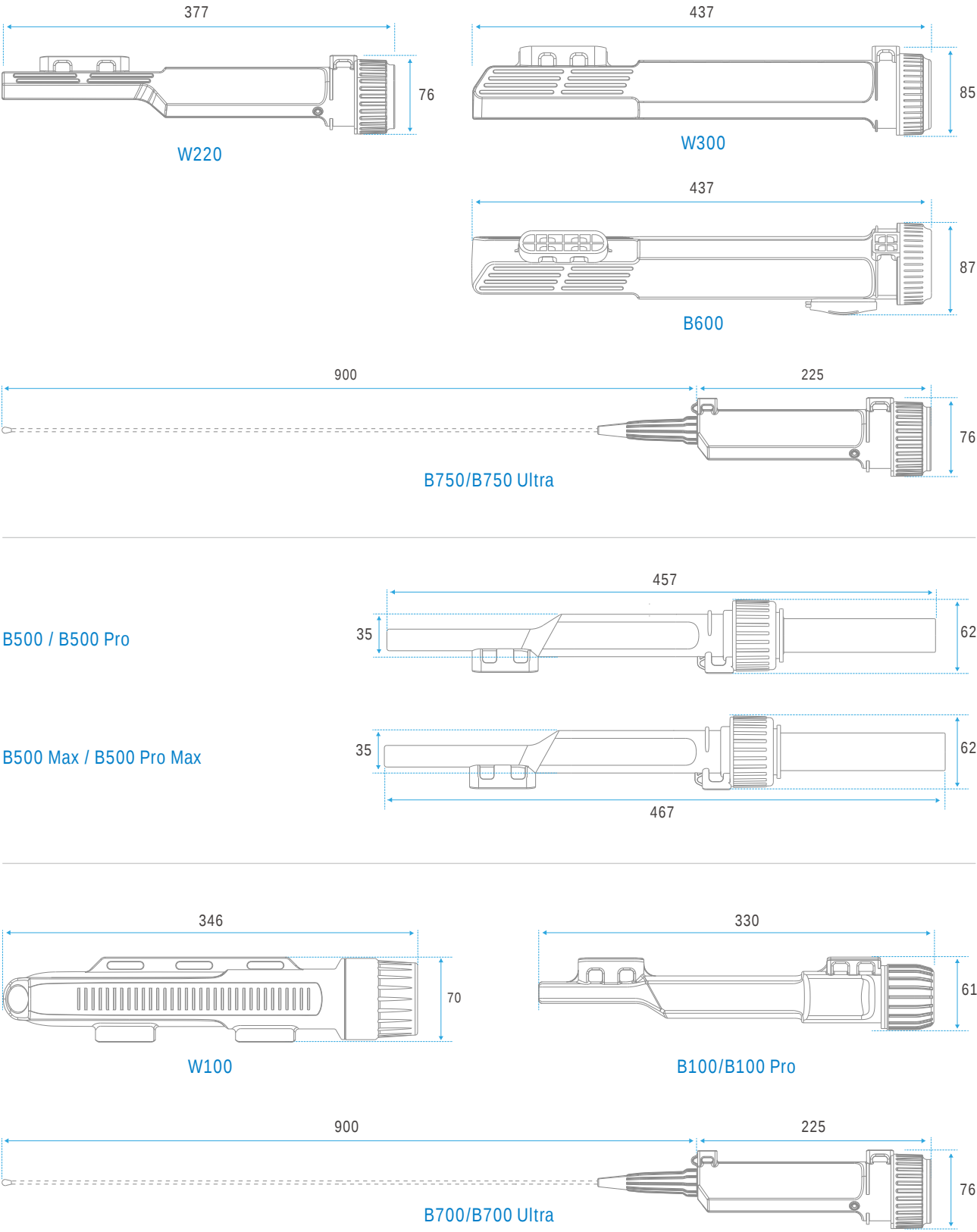
W10P AIS Buoy Charger

- The circuit is protected separately, and the damage of one circuit will not affect other circuits.
- 10 interfaces for charging at the same time.
- Built-in fan has excellent heat dissipation performance.



Parameters				
TX frequency		161.975MHz & 162.025MHz		
Band width		25KHz		
Stability		±1ppm		
Voltage		6.2～8.2VDC		
Current consumption		≤0.3mA (Stanby) , ≤25mA (GPS searching) , ≤2A (Tx)		
GPS start time		≤60s (Cold start), ≤5s (Hot start)		
GPS positioning accuracy		≤10m		
Environment				
Temperature		-25℃～60℃		
Waterproof		IP68		
AIS Tx				
Adjust mode		GMSK BT=0.4		
Adjust index		0.5		
Launch stray		<-36dBm		
Function				
Tx interval time		30s / 1min / 2min / 3min / 5min (Programmable)		
Encrypted version		Using with AIS buoy receiver WR100/WR200		
Model	W220	B750/B750 Ultra	W300	B600
Antenna	Internal antenna	External antenna	Internal antenna	Internal antenna
Battery	2600mAh	2600mAh	2600mAh	2600mAh
Working time	Unlimited endurance	Unlimited endurance	Unlimited endurance	Unlimited endurance
Tx power	10W	10W/12W	10W	10W
Range	10-12nm	16- 18 nm/ 20 - 25nm	10-12nm	14-16nm
Light module	Equipped			
Model	B500	B500 Max	B500 Pro	B500 Pro Max
Antenna	Internal antenna	Internal antenna	Internal antenna	Internal antenna
Battery	2600mAh Replaceable battery	4000mAh Replaceable battery	2600mAh Replaceable battery	4000mAh Replaceable battery
Working time	≥14 days	≥25 days	≥12 days	≥23 days
Tx power	10W	10W	10W	10W
Range	10-12nm	10-12nm	10-12nm	10-12nm
Light module	Not equipped		Equipped	
Model	W100	B700/B700 Ultra	B100	B100 Pro
Antenna	Internal antenna	External antenna	Internal antenna	Internal antenna
Battery	2600mAh	2600mAh	2600mAh	2600mAh
Working time	≥14 days	≥14 days	≥14 days	≥14 days
Tx power	10W	10W	8W	8W
Range	10-12nm	14-16nm	8-10nm	8-10nm
Light module	Not equipped			Equipped

Dimensions



mm

PA1 Power Assist Pump

Patented product

OEM



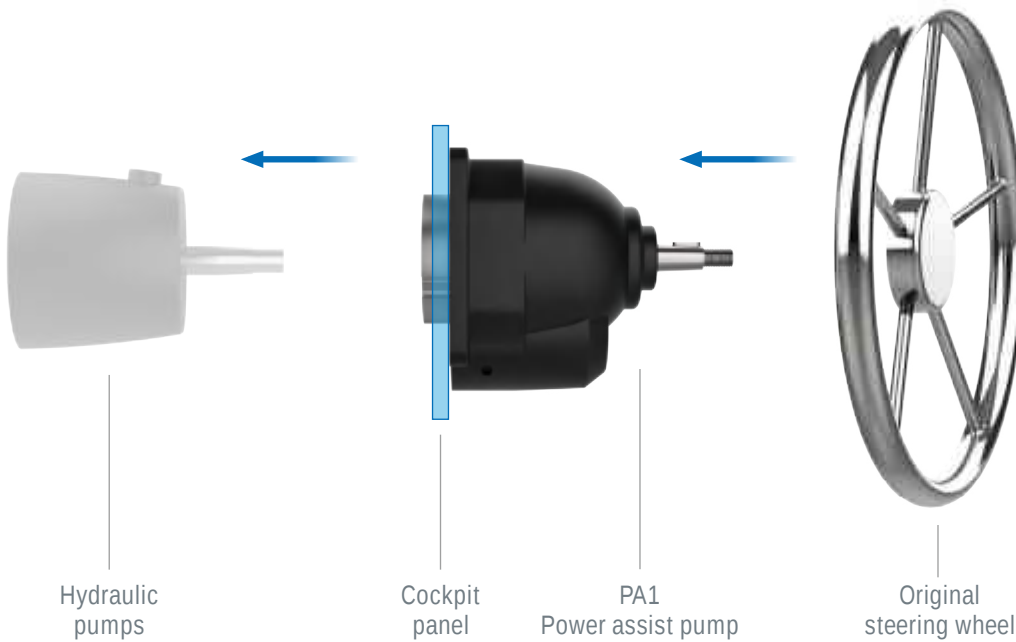
Adaptive Power Assist

Sandemarine's electric power-assisted pump detects steering torque in real time, automatically counteracting the load for stable, effortless control and automotive-grade comfort.



Easy to install and widely applicable

Compatible with various types of vessels and hydraulic pumps from different manufacturers.



2-level power assist adjustment



Supports NMEA2000

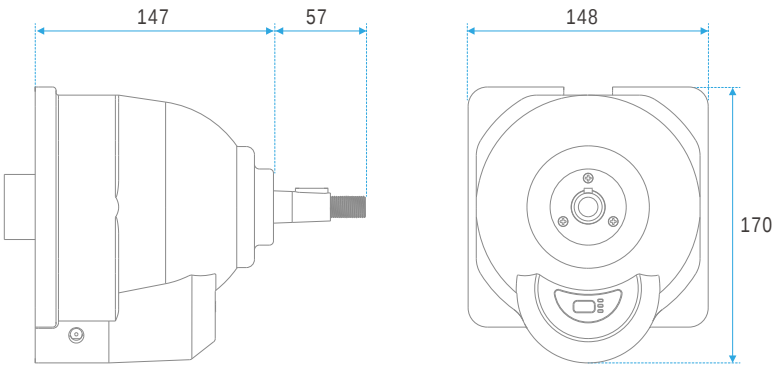


Supports autopilot function (optional)



Disengage the motor and switch to manualmode, if a failure occurs

Power Assist Device	PA1/PA10
Motor	Brushless DC motor
Power assist	Assist level 1 torque: 18 N·m Assist level 2 torque: 10 N·m
Environment	
Temperature	-25°C~55°C
Waterproof	IP67
Power	
Voltage	12/24V DC
Current	12V Max. Current: 20A Average Operating Current: 2A 24V Max. Current: 10A Average Operating Current: 1A
Power	240W
Function	
Power assist	2-level power assist adjustment
Data	NMEA2000
Autopilot	Supports autopilot function (optional)
Dimensions	



PA1

mm

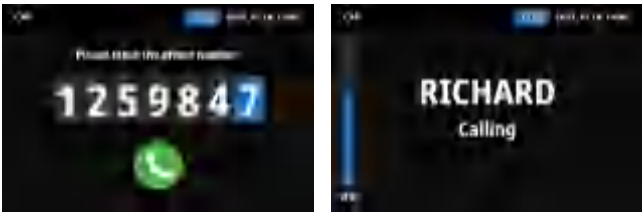
D908 Fishing Phone

Analog&Digital UHF



Phone Number Calling

Each D908 is equipped with a unique seven-digit phone number, which can be dialed directly like a mobile phone by entering the phone number, and the whole conversation is confidential and without noise.



Confidential Group Chat

The group members can chat under the same channel, the same group number and password. The group chat is completely confidential, and there is no need to worry about being monitored.

Contacts, Call Logs, Caller ID

With the function of contacts, call logs and caller ID, you can quickly call someone.



Voltage, VSWR, Power Detection

Real-time monitoring of equipment parameters to quickly detect the cause of failure.



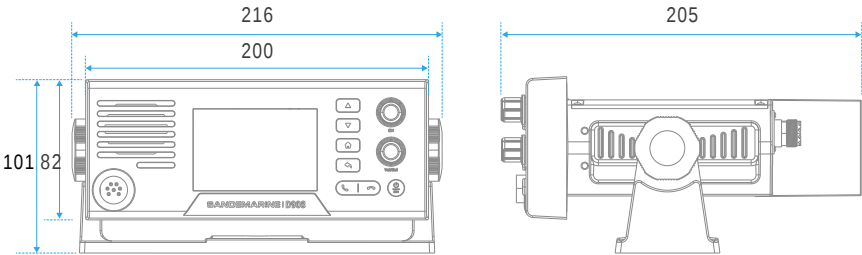
Analog&Digital

Integrated analog and digital modes.

Long-distance Communication

Communication range: 40nm

Fishing Phone	D908
Screen	3.5 inch
Displayable area	73.4×49.0mm
Brightness	230 ints (Max)
Pixel	320×480
Environment	
Temperature	-15℃ —+55℃
Waterproof	IP66
Power	
Power supply	13.8V DC
Current	Tx: <12A@13.8V (SWR≤1.5) Quiescent: 0.37A@13.8V
Installation	
Installation	Desktop installation, Hanging installation, Embedded installation
Digital	
Frequency	424-444MHz
Channel interval	25KHz
Rx sensitivity	≤-119dBm@PER≤20%
Co channel interference	≤10dBc@PER≤20%
Adjacent channel rejection ratio	≥65dBc
Image rejection ratio	≥65dBc
Transmit power	45W/55W/65W
Analog	
Frequency	400~424, 444~480MHz
Channel interval	25kHz/12.5kHz
Rx sensitivity	≤-119dBm (SINAD=12dB)
Adjacent channel rejection ratio	≥65dBc
Transmit power	45W/55W/65W
Functions	
Main functions	Group chat, Phone Number Calling, Analog intercom, My channel(Analog), Contacts, Call logs
Other functions	Standing wave ratio detection, Temperature detection, Preceding power detection, Reverse power detection, High temperature protection,High power protection



D908

mm

EC500 Compass Display Unit

 7 Inch Screen Display
High-brightness, wide viewing angle.

 Multiple display screens
Versatile display options support the input and display of data such as wind, temperature, and humidity, meeting various operational requirements.

 Multiplex data output
Capable of connecting to devices like radar and plotters, supporting NMEA 0183 protocol.

 Day Mode And Night Mode
The display mode is automatically adjusted according to time.



EC200 Compass Antenna



NMEA2000 EC 3/EC 3 Pro Compass Antenna

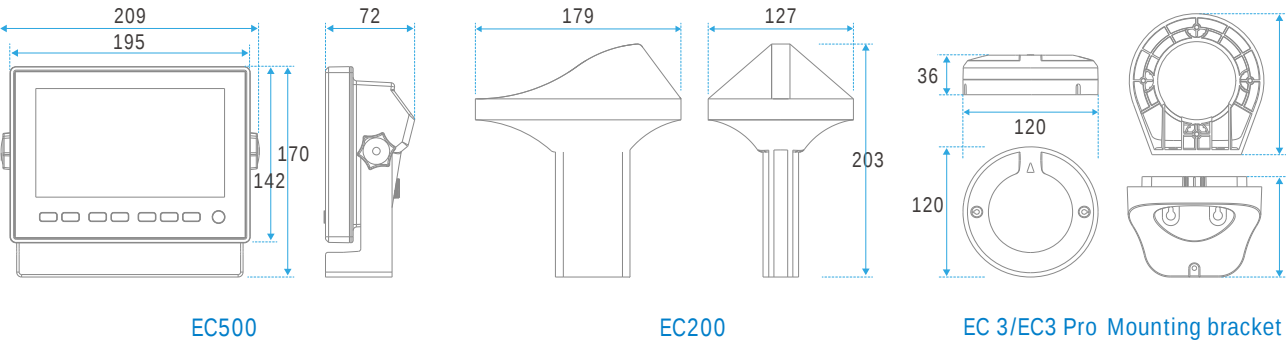


 High-precision positioning data and heading
High-precision gyro and positioning module.
Heading accuracy: $\leq 1^\circ$; Resolution: 0.1° .
The EC3 does not have a positioning function.

 Auto-Calibration
Ensures more precise data.

Compass Display Unit	EC500
Screen	7 inch
Displayable area	153.8×85.6mm
Brightness	400 ints (Max)
Pixel	800×480
Environment	
Temperature	-15℃~55℃
Waterproof	IP65
Power	
Power supply	9-36V DC
Installation	
Installation	Desktop installation, Hanging installation, Embedded installation
Port	
NMEA 0183	6 pin interface × 2: 1 Data input/output (RS485) + 1 Data output (RS232)

Compass Antenna	EC200	EC3 Pro	EC3
Sensor type	GNSS positioning module, fluxgate compass, gyroscope		Fluxgate compass, gyroscope
Accuracy	Accuracy: ±1 ° Heading resolution: 0.1°		
Data	NMEA0183 HDG, RMC	NMEA2000 127250, 127251, 127257 126992, 129025, 129026 129539, 129540, 127258	NMEA2000 127250, 127251, 127257
Environment			
Temperature	-15°C~55°C		
Waterproof	IP68		
Power			
Power supply	12V DC (by display unit)	12V DC (by can)	
Installation			
Installation	Pole mount	Desktop installation, Hanging installation	
Dimensions			



SAT600 Pro Wifi

Class B+ AIS Transponder

- 

Class B+ SOTDMA
5W transmission power for an longer range.
- 

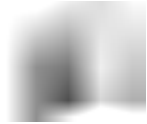
High sensitivity: -118dBm
Increased AIS target capacity, significantly enhancing the reliability and coverage of vessel dynamic monitoring.
- 

Supports NMEA2000 data output
Simultaneously supports multiple NMEA 0183 data channels.
- 

Built-in WiFi & USB
Allows viewing AIS information via USB and wireless connection.
- 

Zero-Insertion-Loss VHF Antenna Splitter
Requires only a single antenna for simultaneous use by both the AIS transceiver and VHF radio.
- 

Built-in GPS Antenna
Also supports an external GNSS antenna.



AIS Transponder/Receiver/Locator

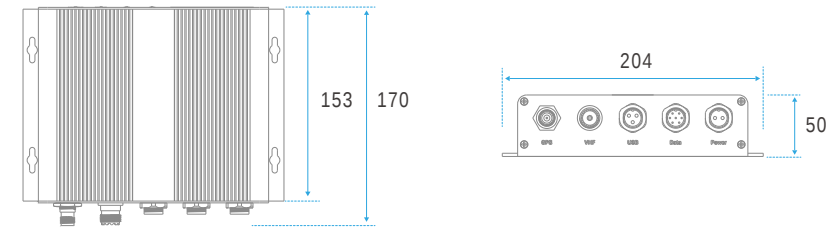
All models support: NMEA 0183, USB, and MOB SOS.

	NMEA 2000	Tx power	Sensitivity	Built-in GPS	Wifi	VHF splitter
SAT400	✓	CSTDMA 2W	-115dBm			
SAT400 Pro	✓	CSTDMA 2W	-118dBm			
SAT400 GPS	✓	SOTDMA 5W	-115dBm	✓		
SAT500 Pro	✓	SOTDMA 5W	-118dBm			
SAT500 Pro Wifi	✓	SOTDMA 5W	-118dBm		✓	
SAT600 Pro Wifi	✓	SOTDMA 5W	-118dBm		✓	✓
Receiver SAR300 Pro	✓		-118dBm			

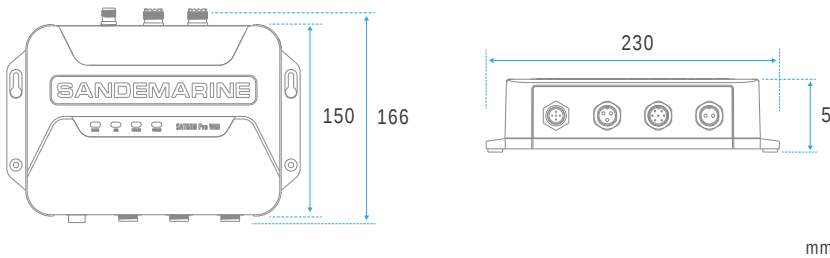
	NMEA 2000	Tx power	Sensitivity	Built-in GPS	Wifi	VHF splitter
SAT200		CSTDMA 2W	-115dBm			
SAT200 Pro		CSTDMA 2W	-118dBm			
Receiver SAR100		CSTDMA 2W	-115dBm			

Parameters	
Frequency	156.025MHz~162.025MHz
Channel spacing	25KHz
Modulation	GMSK
Bit rate	9600 bps
Number of AIS trasmitter	1
Tx power	2W (CSTDMA) / 5W (SOTDMA)
Number of AIS Receiver	2 (Contains A and B channels)
AIS channel A (default)	CH878(161.975)
AIS channel B (default)	CH88B(162.025)
Rx sensitivity	SAT100/SAT200/SAT400: -115dBm@PER≤20% SAT200Pro/SAT300Pro/SAT500Pro/SAT600Pro: -118dBm@PER≤20%
Power supply	9-36 VDC
Environment	
Temperature	-25°C~55°C
Waterproof	IP54
Port	
Indicator	Power, Error, Tx, Rx
NMEA0183	38,400 baud (default), programmable Output ×2, Input ×1
RS232	38400 baud (default), programmable, USB connectivity for PC/MAC
NMEA2000	SAR100/SAT200/SAT200 Pro series not equipped
GPS	
Channels	72
Standards	
Standards	IEC 62287-1; IEC 61108-1; IEC 6112-1; IEC 60945; ITU-R M1371-5
Dimensions	

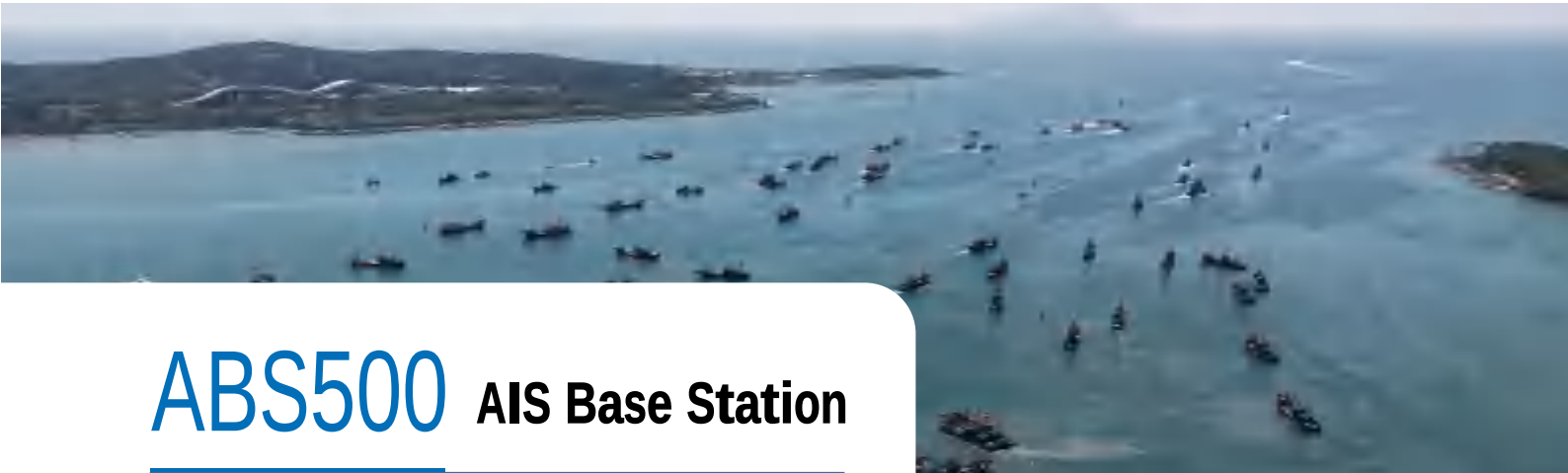
SAR100/SAT200 series



SAR300/SAT400 series
SAT500 series/SAT600 Pro(Wifi)



mm



ABS500 AIS Base Station

The ABS500 AIS Base Station features versatile data service interfaces and a flexible management configuration mode. Its performance complies with the IEC 62320 standard. This product is primarily used for monitoring waterway vessels and broadcasting information. It can operate as a standalone unit or be integrated into VTS and VMS systems.



Standard Compliance

- Incorporates complete AIS base station functionality, complying with the IEC 62320-1 (2015-01) protocol.
- Features AIS AtoN (Aid to Navigation) base station capability, complying with the IEC 62320-2 (2016-10) protocol.

AIS Message & Advanced Functions

- Capable of receiving and transmitting all AIS message types.
- Supports optional ASM (Application Specific Message) and VDES (VHF Data Exchange System) functionalities.
- Supports the FSR (Frame Summary of AIS Reception) function, providing scheduled reports on AIS reception status.
- Supports the VSI function, which reports signal information from the VDL (VHF Data Link).

Configuration & Monitoring

- Compatible with configuration and monitoring using SAAB PSS software, version V5.9.
- Supports remote monitoring, configuration, and firmware upgrades via a web interface.

Hardware & Reliability

- Equipped with both serial (RS-232/485) and Ethernet network interfaces.
- Features an internal data caching mechanism.
- Supports hot-standby redundancy for high system availability.

Performance

- Exceptional receiving sensitivity, better than -118 dBm at PER (Packet Error Rate) = 20%.



ABS500

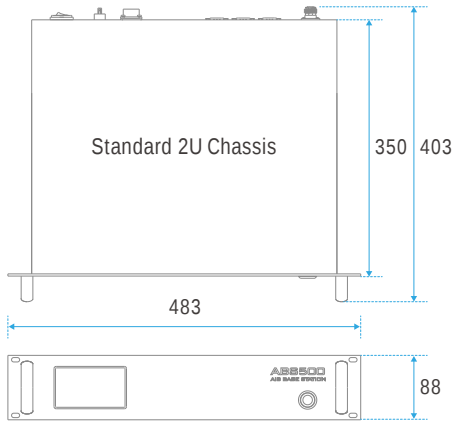
AIS Base Station



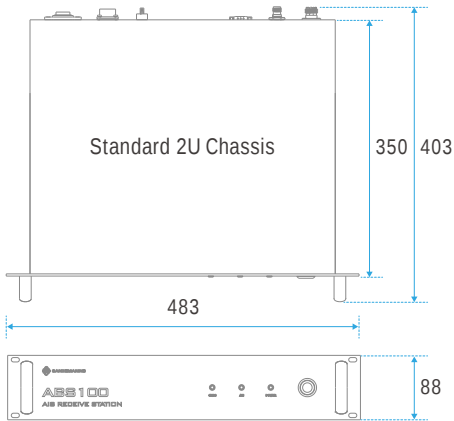
ABS100

AIS Receive Station

AIS Base Station	ABS500	ABS100
Frequency	156.025MHz~162.025MHz	
AIS receiver	CH87(161.975 MHz), CH88(162.025MHz)	
Channel spacing	25kHz , supports VDE 50/100 kHz	25KHz
Rx sensivity	AIS: -118dBm@PER≤20% ASM: -107dBm@PER≤20%	AIS: -118dBm@PER≤20%
Bit rate	9.6kbps(AIS), 19.2kbps(ASM), 307.2kbps(VDE max bit rate)	9.6kbps(AIS)
Tx power	Low : 1W, High : 12.5W	×
Power supply	AC 110V~250V/DC 24V/48V	
Environment		
Temperature	-25°C~55°C	
Waterproof	IP54	
Display And Port		
Screen	5-inch color capacitive touchscreen	
Data port	1×RS-232, 2×RS422	1×RS-232
Ethernet	2×RJ45, support TCP, HTTP	1×RJ45, support TCP, HTTP
GPIO port	DB9 port, 1PPS IN, Slot Pulse, AIS Tx Pulse	×
Indicators	Power	Power, AIS, GNSS
GNSS		
Channels	Supports up to 72 channels	
GNSS	Compatible with BDS, GPS, GLONASS, Galileo, and other systems	
Functions		
AIS	AIS transceiver, AIS channel management, AIS slot analysis	AIS receiver, AIS slot analysis
ASM	Optional	×
VDES	Optional	×
Web	Built-in Web Server	
TCP	SAAB PSS software monitoring, annotation blocks	Annotation blocks
Hot-standby redundancy	Support	×



ABS500



ABS100

mm





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