SI-TEX SAS-300

SI-TEX's SAS-300 Class B AIS transceiver delivers a large 7 inch high-resolution color TFT display with the ability to track all AIS targets on a standard "radar" display, over included world-wide base charts or (with optional SD Card) overlaid onto C-MAP MAX cartography. Advanced Rmax technology maximizes the unit's receive/transmit range and ensures that all available AIS messages are received and decoded in real time. The SAS-300 tracks the movement of up to five vessels with track history and optional live details on individual vessels. The SAS-300 user interface helps boaters manage today's crowded waterways and ever-increasing amount of available AIS data. Boaters can easily set up operating parameters and alarms to see what's important to them and navigate with confidence in any conditions.

SITEX

www.si-tex.com



Vesper Marine XB-8000

The Vesper Marine XB-8000 is much more than a full-featured Class B AIS transponder with NMEA 2000®, 0183, USB and WiFi. It's a WiFi router for up to five mobile devices such as tablets, smart phones and computers and a gateway that converts NMEA 2000 instruments to WiFi, making heading, wind, depth, speed and other data available on mobile devices. It can be used as a primary or backup GPS for any other device on a NMEA 2000 network and its WiFi can be configured to join an existing network for incredible flexibility and expansion. It translates NMEA 2000 data for existing PC and Mac navigation software to use via USB and WiFi. It even provides NMEA 2000 data to NMEA 0183-based chartplotters. The XB-8000 includes an external GPS antenna and Vesper Marine's WatchMate mobile app, which provides situational awareness with a unique plotter, configuration, and monitoring tools.

www.vespermarine.com

WhiffleTech VDL 6000

The VDL 6000 AIS Class A/Inland transponder provides SOLAS compliance and BSH certification at very attractive prices. The VDL 6000 AIS Inland transponder is based on our well-proven AIS Class A transponder and developed in accordance with the latest AIS Inland standard requirements. It is type approved by Fachstelle der WSV fur Verkehstechniken FVT. The date link communication covers standard AIS messages and the required static, voyagerelated and dynamic data as well as blue sign messages for inland navigation for increased situational awareness and improved safety for the individual ship. The information received from, and provided to, ships is easily plotted on any ARPA radar or electronic chart system. Maximum situational awareness is accomplished.

Garmin AIS 600

This black box AIS transceiver allows you to receive AIS target data as well as transmit your own vessel information to other AIS receivers in your area. The AIS 600 has a built-in active splitter that allows the use of your existing VHF for easy installation. It also employs ClearTrack technology, ensuring there's no interruption of AIS traffic position while the VHF radio is in use. In addition, the AIS integrates with a Garmin chartplotter and VHF radio via NMEA 2000®, giving you the ability to initiate a call to any MMSI (Maritime Mobile Service Identity) target directly from the chartplotter by selecting the Call With Radio function.

www.garmin.com



July/August 2014

AIS

Automatic Identification Systems



Digital Yacht DeepSea CLB2000

Designed for the light commercial, non-mandated AIS market, the CLB2000 Class B AIS transponder from Digital Yacht offers multiple NMEA 0183 outputs, NMEA 2000® and USB connectivity. It's supplied with a combination VHF-GPS dipole antenna for simple installation on workboats and fishing vessels. Just one coax cable is required from the antenna to the transponder, which greatly eases installation on commercial vessels. Digital Yacht also offers the CLA1000 IMO-approved Class A transponder.

www.digitalyacht.co.uk



Koden KAT-100

The IMO-wheelmarked KAT-100 Class A AIS is an ideal solution for SOLAS (Safety of Life at Sea) and sub-SOLAS class vessels, workboats and high-end private yachts. The KAT-100 transmits and exchanges the full range of required dynamic, static (vessel info) and voyage-related data with other AIS-equipped vessels. A single AIS transmitter and three AIS receivers are used to optimize performance. The KAT-100's 16 channel GPS receiver provides reliable time synchronization per Class A requirements. All this is provided in a compact, rugged enclosure with seven serial data ports (four bidirectional). Simple menu and soft-key controls (with a large rotary knob) provide easy access to key features, while Koden's LED-back-lit, high-contrast LCD display delivers needed information clearly. For commercial applications, a front-mounted pilot plug is provided.

www.si-texkoden.com

Furuno FAI50

The Furuno FA150 is a Class A, IMO-approved Universal AIS transponder capable of exchanging navigation and ship data between own ship and other ships or coastal stations. The FA150 consists of a transponder unit and a compact 4.5 inch silver bright display. The FA150 display is designed to accommodate a simple and space-saving installation with a user-friendly ergonomic design. The transponder unit contains a VHF transmitter, two TDMA receivers on parallel VHF channels, a DSC Channel 70 receiver, interface processor and internal GPS receiver. The GPS receiver is a 12-channel all-in-view receiver and has Differential (DGPS) capabilities. The GPS receiver provides UTC reference and also gives position, COG and SOG in the event that a connected external GPS receiver fails.

www.furunousa.com





ComNav Commander P2



ComNav Commander P2 is the most versatile and reliable steering autopilot in the market. Be it work boat, tug boat, power boat or sail boat, it's all a matter of menu selection, and you have all the characteristics to adjust to meet the

requirements. With built-in drive for DC reversing pump and DC electromechanical solenoids, the single processor unit allows simple and easy installation.

Commander P2 supports many different types of steering systems, including azimuth drives, AC solenoids or jet drives. Fully compatible with most on-board NMEA 0183 equipment. An option of two secondary stations allows full control of the steering from any of these stations. For mobility, use a handheld remote control as your third station. Autopilot comes with a three-year extended warranty serviced by our global dealer network.

www.comnavmarine.com





Simrad IS40/OP10

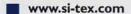
The Simrad OP10 Pilot Controller seamlessly interfaces with the IS40 instrument to offer boaters convenient remote access of pilot-steering functions. Featuring large, clear keys, straightforward operation and backlighting for night use, the pilot control's interface employs single-mode toggle and includes a prominent 'off' key for returning the pilot to standby. The controller is connected through a single micro-C connection on the back of the device and sports a unique clip mount for easy installation. Compatible with the Simrad AP24 and AP28, it can be networked with NSS, NSE or NSO multi-function displays for remote autopilot operation. When integrated with a Simrad navigational system, pilot information and control can be accessed and operated from either solution. The OP10 also supports autopilot control for Volvo IPS drives.

www.simrad-yachting.com/en-us

SI-TEX SP-110

Paired with SI-TEX's Mechanical Drive Unit, the SP-110 Autopilot is a perfect solution for smaller-sized boats with cable steering. Rugged and reliable, the SP-110's Virtual Rudder Feedback eliminates the need for a separate rudder feedback unit, simplifying installation and reducing the overall cost. The SP-110 features a splash-proof control head measuring just 4.3 inches square for easy mounting on any boat. A transflective LCD display shows course and function data in large digits. The SP-110 is designed for simple operation using four buttons, delivering better than 1 degree course detection

and GPS mode for easy automatic waypoint steering. It can be easily paired with SI-TEX's waterproof, floatable SRS-100 wireless remote for steering control anywhere onboard. SI-TEX backs the SP-110 with a standard two-year limited warranty.







RS

Furuno FCV587

The Furuno FCV587 is a dual-frequency,

8.4 inch color LCD

sounder featuring Furuno's DSP technology. Utilizing Furuno's legendary fishfinder technology, the FCV587 adds three incredible new features. Furuno's exclusive Bottom Discrimination feature indicates if the bottom is composed primarily of rock, sand, gravel or mud, providing valuable information to help you locate rich fishing grounds and boost your catch. Accu-Fish allows the FCV587 to display the actual fish size onscreen, or actual depth of the fish target. Post-Processing Gain Control shows changes in the gain setting applied to all of the echoes already on the screen. Because the changes are applied to both new and existing returns, you will be able to quickly and easily find the right gain setting for your conditions.

www.furunousa.com



The new 50/200 kHz SVS-760F 600 watt sounder features a vertically oriented, sunlight viewable 7.5 inch color LCD display to optimize presentation of bottom composition/contour and fish targets beneath the vessel. With depth ranges down to 4,800 feet, clearly marked controls and an IPX-7 waterproof case, this sounder is ideal for professional



and recreational use. Digital sounding technology eliminates unwanted noise and provides a sharp image of the seabed and fish targets. The unit's high-speed CPU delivers seamless zooming and provides superior readings even at higher boat speeds. A powerful processor also ensures that even the smallest fish targets are displayed. This sounder boasts the many professional features fishermen expect from SI-TEX, including the ability to back up and record important data onto an SD card.

www.si-tex.com

Onwa KP-1299C

Onwa Marine Electronics' consumer-friendly KP-1299C is a 12 inch GPS chartplotter and echo sounder combo. It was designed to give fishermen three important functions all in one. The compact, full-featured KP-1299C has a dual-frequency, 50 kHz and 200 kHz (alternately transmitted), echo sounder and a 600 watt power output transducer. The echo sounder has a built-in interference rejecter for unwanted signals caused by the equipment from nearby vessels. It also has a split-screen feature that displays the GPS plotter and echo sounder in one screen that provides the vessels location, along with depth and location of fish.





Humminbird ONIX

Manufactured in Humminbird's factory in Eufaula, Alabama, is the ONIX series. This all-inone sonar GPS unit is packed with Humminbird's powerful technologies, like patented 360 Imaging and Side Imaging, which give sonar data out to 240 feet. The Cross Touch functionality enables users to combine full multi-gesturing touch-screen functions along with full keypad commands. Its internal 10 Hz GPS antenna locks on quickly and minimizes rigging time. The 10.4 and 8.4 inch screens feature 1024 x 768 resolution that serve as the canvas. ONIX is compatible with NMEA 2000® and Fusion and networks with Ethernet accessories like radar and AIS. Built in Tri-fuel technology gives boaters a choice of Navionics, C-MAP or Humminbird's AutoChart Live, which lets users create detailed maps of desired waters and see it all happen live, right on the screen.

www.humminbird.com

FISHFINDERS

Your underwater eye

Koden CVS-FX1

Capable of transmitting on variable frequencies from 24 to 240 kHz in 0.1 kHz steps, the powerful new 3 kW Koden CVS-FX1 is a true broadband sounder for professional fishing applications. This exclusive capability not only lets fishermen fine-tune performance for particular conditions and target species, it minimizes interference from sounders on nearby vessels. Operators can transmit on up to four frequencies simultaneously within the range of the unit's two broadband transducers. The FX1 also features six Configuration Memories that allow the operator to choose up to 24 different operating frequencies and store them in memory for instant recall depending on the fish species being targeted. The CVS-FX1 covers depth ranges from 5 to 8,000 feet.





Lowrance Elite-7 CHIRP

The Elite-7 CHIRP series is available as a fishfinder/chartplotter combo, or standalone fishfinder or chartplotter and sets the standard for cutting-edge performance and easy-to-use fishfinding. The new affordable series adds CHIRP sonar to Lowrance's award-winning, built-in Broadband Sounder and DownScan Imaging fishfinder technologies. Providing anglers with the best possible view of the water column, CHIRP sonar produces greater sensitivity, improved target resolution and superior noise rejection. The Elite-7 features a highly accurate, built-in GPS antenna and a detailed US map with more than 3,000 lakes and rivers, plus coastal contours to 1,000 feet. A micro SD card can be used to display Lake Insight and Nautic Insight HD

and PRO cartography, as well as Navionics Gold, HotMaps Premium, Fishing Hotspots PRO and Jeppesen C-Map Max-N charts.

www.lowrance.com/en-us

(Fishfinders continued on page 66)

RADARS

Boosting situational awareness

Koden MDC-2500

The Koden MDC-2500 Series radar is a professional system with a 15 inch color LCD display and a long list of advanced radar features, including True Trail Function, standard ATA (Automatic Tracking Aid) for up to 50 targets and standard C-MAP MAX or NT+ cartography overlay (with optional chart). New Koden signal processing technology ensures that even small targets are constantly displayed under real-world conditions. When connected with an AIS receiver, the



MDC-2500 displays critical information on up to 200 targets, including vessel name, bow direction and vessel speed. The MDC-2500 is operated using a separate keyboard, providing users with a choice of installation locations. A powerful solution for commercial vessels and high-end yachts, the MDC-2500 is available in configurations from 4 kW/48 nm range to 25 kW/96 nm range.

www.si-texkoden.com

Garmin GMR 24 xHD

Garmin's next-generation, 4 kW high-definition GMR 24 xHD dome radar with intuitive advanced open-array features is very easy to use. Intuitive operation makes modes and settings simple to understand so you can enjoy great performance without a lot of technical know-how. The GMR 24 xHD has a narrower beam width that paints a very precise, high-resolution image.

New Dynamic Auto Gain and Dynamic Sea Filter continually adjust to your surroundings, providing optimal performance in varying conditions. You can choose from multiple levels of



aggressiveness or use manual gain adjustment and dual-range operation, allows split-screen display of far and close radar views in full 8-bit color. The GMR 24 xHD has a range of 48 nautical miles.

www.garmin.com



JRC JMR-9282-S

IRC, which was one of the first to introduce an IMO-compliant solid state S-band radars in 2008, is introducing a new maintenance-free model that meets international performance standards with an 8 foot antenna. This is something that traditional magnetron-based S-band radars are only able to meet with a 12 foot antenna. Part of the company's new multi-function display series, the JMR-9282-S has an output power of just 250 watts compared to 30 kW magnetron models. Owners and operators of smaller commercial vessels, deep-sea fishing vessels and megayachts who recognize the benefits that S-band radar offers, but have not had the available swing space to install one, now have a truly viable alternative that is commercial grade and fully type approved.

www.jrcamerica.com

52 Marine Electronics Journal July/August 2014

Lowrance Broadband 4G

The Lowrance Broadband 4G Radar next-generation, solid-state Frequency Modulated Continuous Wave (FMCW) radome is the first radar to use Beam Sharpening, significantly improving resolution to deliver the sharpest radome images in the world. This innovative target-separation control allows users to adjust the level of separation by changing the width of the beam to meet specific navigational needs. Offering signature Broadband Radar close-range capability, the radar's exclusive dual-range functionality makes it the only recreational radar capable of simultaneously displaying distances from 200 feet to 36 nautical miles (nm) from a single dome. The system offers 48 rpm speeds for near-instant updates at ranges less than 1 nm.

www.lowrance.com/en-us



SI-TEX T-760

The affordable new SI-TEX T-760 Series color radar brings advanced features like touch-screen control, 50 target AIS tracking and standard MARPA (Mini-Automatic Radar Plotting Aid) to a wide audience of cruisers, sailors and fishermen. The T-760's case measures only 5.4 x 8.9 x 3.5 inches. Yet, this

system boasts a long list of professionalgrade features, including powerful 4 kW output, up to 48 nm range, multi-speed (16/27/36/48 rpm) antenna rotation, 50 target AIS tracking capability and standard 10 target MARPA. Operation is easily controlled via the 7 inch touch-screen color LCD display and single rotary encoder dial. This radar is available with a choice of 18 or 24 inch radome antennas and is backed by SI-TEX's two-year limited warranty and Long Island,

www.si-tex.com

NY-based service department.

WhiffleTech[™] Safety, *saving lives and your money*.

VDL 6000 AIS Class A and Inland Transponder



- Class A and Inland Transponder in a single, dynamic, compact device
- . Compatible with ECDIS and ARPA radar
- SOLAS Compliant and BSA Certified
- . Best AIS Class A/Inland value in the Industry

Keeping You Safe. WHIFFLETECH

Titan Commercial Grade Display Visibly Superior Technology





(Available in 10",15" and 19")

- Full LED backlight, Deep Dimming
- 0 100% via potentiometer
- Versatile mounting options
- Multiple inputs DVI & VGA in S-Video and Composite

207.647.3300 • whiffletech.com facebook.com/whiffletech



Standard Horizon GX2200 MATRIX

The GX2200 MATRIX AIS/GPS features a 66 channel WAAS GPS antenna integrated into the front panel of the radio—now there is no need to hassle with wiring the radio to a GPS for DSC (Digital Selective Calling) or AIS (Automatic Identification System). Out of the box and ready to go, acquiring AIS and AIS SART targets, DSC calling, position sharing, waypoint navigation, and navigation to DSC distress calls can all be performed with just a few simple steps. The MATRIX AIS/GPS dis-

plays AIS target information (MMSI, Call Sign, Ship Name, BRG, DST, SOG and COG), allows you to contact an AIS-equipped ship directly using DSC, shows your vessel's position in relation to AIS targets and alerts you when an AIS ship may be approaching too close to your location via the Closest Point of Approach (CPA) Alarm. One antenna input is all that is needed since the MATRIX AIS/GPS utilizes the VHF antenna to receive



www.standardhorizon.com

SI-TEX MT-550

AIS targets from ship's Class A

or B AIS transponders.

SI-TEX's affordable new MT-550 radio provides recreational and light commercial vessels with reliable DSC VHF communications and built-in dual-channel AIS tracking/data output in one compact, waterproof unit. The MT-550's Class D DSC VHF transceiver provides reliable communications on all international maritime channels, with 25W/1W output power, superior sensitivity and low noise. Standard features include one-button access to Channel 16, Priority/All/Memory Scan and Instant DSC Distress signaling for enhanced safety. An alphanumeric keypad microphone allows for instant channel selection and control of the radio from the microphone. The MT-550 features a large dot-matrix LCD display that provides channel, channel name and other

radio function data, along with lat/lon position indication when connected to GPS. A Position Send/Request function is also available with GPS data input.

www.si-tex.com



Lowrance Link-8

The ultra-rugged, waterproof Lowrance Link-8 fixed-mount Class D, DSC VHF radio features a large, best-in-class 128 x 256-pixel LCD, 25/1 watt performance, NMEA 2000® interface and dual-channel AIS receiver to display collision avoidance data. Designed for worldwide use, Link-8's intuitive interface and large rotary knob provides simple channel changing, menu navigation and control setting. Its Track Your Buddy feature displays the location of up to three boating friends. Its microphone includes six quickkeys for simple helm operation, easy-grip rubber molding and a speaker. Additional features include GPS navigation, MOB, extra large Channel 16 key, dedicated volume and squelch knobs, weather keys, selectable Dual/TriWatch modes, local/distant functions, three user-selectable channels, 4 watt speaker and a wealth of other VHF capabilities. The waterproof Link-8 includes a twoyear warranty.

www.lowrance.com/en-us



VHF Fixed Mount