



YOUR AIS EXPERTS

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AIS Transponder Comparison Guide

Product	AIS type	NMEA 0183	NMEA 2000	USB	Wi-Fi	Blue tooth	SAT-AIS / Msg 27	VHF Radio	Monitoring	VDR	VHF antenna splitter	GPS antenna bundled	NMEA multiplexing	Integrated screen	IP rating	Warranty	Online Price
AMEC WideLink B600 Class B SOTDMA AIS Transponder	Class B SO (5 watt)	2	✓	✓	✗	✗	✓	✗	✗	SD card	Extra cost	Portable antenna	✓	✗	IP67	2 year	\$539
AMEC WideLink B600W Class B SOTDMA AIS Transponder	Class B SO (5 watt)	2	✓	✓	✓	✗	✓	✗	✗	SD card	Extra cost	Portable antenna	✓	✗	IP67	2 year	\$629
AMEC WideLink B600S Class B SOTDMA AIS Transponder	Class B SO (5 watt)	2	✓	✓	✗	✗	✓	✗	✗	SD card	Integrated	Portable antenna	✓	✗	IP67	2 year	\$649
AMEC CAMINO-701 Class A AIS Transponder	Class A (12.5 watt)	✓	✓	✓	✗	✗	✓	✗	✗	✗	N/A	Marine-grade	✓	Color	IPX2	2 year	\$1,649
em-trak A200 Class A AIS Transponder	Class A (12.5 watt)	✓	✓	Opt.	✓	✗	✓	✗	✗	SD card	N/A	Marine-grade	✗	Color	IP67	3 year	\$1,599
em-trak B400 Class B AIS Transponder	Class B CS (2 watt)	✓	✓	Opt.	✓	✗	✓	✗	✗	SD card	Extra cost	Marine-grade	NMEA 0183 only	Color	IP67	3 year	\$1,249
em-trak B921 Class B CSTDMA AIS Transponder	Class B CS (2 watt)	2	✓	✓	✗	✗	✗	✗	✗	✗	Extra cost	Internal	NMEA 0183 only	✗	IP67	3 year	\$474
em-trak B922 Class B CSTDMA AIS Transponder	Class B CS (2 watt)	2	✓	✓	✓	✓	✗	✗	✗	✗	Extra cost	Internal	NMEA 0183 only	✗	IP67	3 year	\$609
em-trak B923 Class B CSTDMA AIS Transponder	Class B CS (2 watt)	2	✓	✓	✗	✗	✗	✗	✗	✗	Integrated	Internal	NMEA 0183 only	✗	IP67	3 year	\$569
em-trak B924 Class B CSTDMA AIS Transponder	Class B CS (2 watt)	2	✓	✓	✓	✓	✗	✗	✗	✗	Integrated	Internal	NMEA 0183 only	✗	IP67	3 year	\$699
em-trak B951 Class B CSTDMA AIS Transponder	Class B SO (5 watt)	2	✓	✓	✗	✗	✓	✗	✗	✗	Extra cost	Internal	NMEA 0183 only	✗	IP67	3 year	\$549
em-trak B952 Class B CSTDMA AIS Transponder	Class B SO (5 watt)	2	✓	✓	✓	✓	✓	✗	✗	✗	Extra cost	Internal	NMEA 0183 only	✗	IP67	3 year	\$679
em-trak B953 Class B CSTDMA AIS Transponder	Class B SO (5 watt)	2	✓	✓	✗	✗	✓	✗	✗	✗	Integrated	Internal	NMEA 0183 only	✗	IP67	3 year	\$669
em-trak B954 Class B CSTDMA AIS Transponder	Class B SO (5 watt)	2	✓	✓	✓	✓	✓	✗	✗	✗	Integrated	Internal	NMEA 0183 only	✗	IP67	3 year	\$829
Garmin AIS 800 Class B Transponder	Class B SO (5 watt)	✓	✓	✓	✗	✗	✓	✗	✗	✗	Integrated	Marine-grade	✗	✗	IPX7	2 year	\$899
Raymarine AIS700 Class B SOTDMA AIS Transceiver	Class B SO (5 watt)	✓	✓	✓	✗	✗	✓	✗	✗	✗	Integrated	Marine-grade	✗	✗	IPX6/7	2 year	\$999
Simrad RS40-B VHF Radio with Class B AIS and GPS Antenna	Class B CS (2 watt)	✓	✓	✗	✗	✗	✗	✓	✗	✗	Extra cost	Marine-grade	✗	Mono with radio	???	2 year	\$1,199
Vesper Cortex M1 with smartAIS and Vessel Monitoring	Class B SO (5 watt)	✓	✓	✗	✓	✗	✓	✗	✓	✗	Integrated	Marine-grade	✓	Optional handset	IPx7	2 year	\$1,299
Vesper Cortex V1 AIS/VHF radio with smartAIS and Vessel Monitoring	Class B SO (5 watt)	✓	✓	✗	✓	✗	✓	✓	✓	✗	Integrated	Marine-grade	✓	Included handset	IPx7	2 year	\$1,849
Vesper WatchMate Vision2	Class B CS (2 watt)	✓	✓	✓	✓	✗	✗	✗	✗	✗	Extra cost	Internal	✓	Color	IPx7	2 year	\$1,150
Vesper XB-6000 AIS Transponder	Class B CS (2 watt)	✓	✓	✓	✗	✗	✗	✗	✗	✗	Extra cost	Marine-grade	✓	✗	IPx7	2 year	\$555
Vesper XB-8000 AIS Transponder	Class B CS (2 watt)	✓	✓	✓	✓	✗	✗	✗	✗	✗	Extra cost	Marine-grade	✓	✗	IPx7	2 year	\$740

NOTE: See next page for feature definitions.

FEATURE	DEFINITION
AIS type	<p>There are two types of Class B AIS Transponders:</p> <p>Class B CSTDMA 2-watt: The traditional Class B units, have a transmit range of 5-7 miles and use the carrier sense system for managing transmission slots.</p> <p>Class B SOTDMA 5-watt: This is a new type of Class B transponder. These units transmit with 5 watts of power and typically transmit 10-15 miles. These use the same self-organized slot management system as commercial Class A transponders.</p> <p>We also sell Class A 12.5-watt transponders which are typically used on commercial vessels. These have a transmit range of 25-30 miles.</p> <p>All AIS transponders have integrated AIS receivers in addition to the AIS transmitter.</p>
NMEA 0183	<p>This allows the transponder to be connected to NMEA 0183 marine devices typically for outputting AIS and GPS data to chartplotters. Transponders can also often take NMEA 0183 data, such as heading data, on the input wires. NMEA 0183 uses two wires for output signals and two for input. All transponders we sell support NMEA 0183.</p>
NMEA 2000	<p>NMEA 2000 is the industry-wide standard for interconnecting low and medium bandwidth marine devices. A transponder with this feature can be easily connected to an existing NMEA 2000 network allowing for AIS and GPS data exchange between the transponder and other NMEA 2000 devices such as chartplotters.</p>
USB	<p>A USB interface allows the transponder to be programmed using a PC or Mac. The USB interface can also be used for sending AIS and GPS data to a PC or Mac-based marine navigation package.</p>
Wi-Fi and Bluetooth	<p>Wi-Fi support allows the transponder to be used wirelessly with mobile devices and computers. When coupled with AIS-capable navigation software and apps on devices such as iPads, end users can see AIS traffic overlaid on charts. Many popular apps for iPad (Navionics, iNavX, TZ iBoat, SealQ, iSailor, iRegatta), Android (Navionics, OpenCPN, iSailor, MemoryMap), Windows-based PCs (Rose Point Coastal Explorer, TimeZero) and Mac (OpenCPN, MacENC) can be used with your transponder via a wireless connection. Some vendors, such as Vesper, have their own advanced mobile apps that do sophisticated alarm management, anchor alarm and more.</p> <p>Some em-trak transponders also support Bluetooth connectivity providing even more options for wireless connections.</p>
SAT-AIS / Message 27	<p>Class B SOTDMA and Class A transponders typically support long-range AIS "Message 27" which is a special vessel identification message transmitted on different frequencies by the transponder and optimized for reception by AIS-enabled satellites (SAT-AIS). These higher-powered transponders are also more likely to be picked up by satellites. If you are travelling in remote waters and want to be tracked by satellite AIS services, consider a transponder that supports this capability.</p>
Integrated VHF Radio	<p>Some AIS transponders include an integrated VHF radio in addition to the AIS transceiver. The Vesper Cortex line allows for multiple wired or wireless handsets to be added to the Cortex M1 hub. The Cortex V1 product includes the M1 hub and one wired handset. These handsets can be used for VHF radio communications, AIS display and more.</p>
Remote Monitoring	<p>The Vesper Cortex line also includes remote vessel monitoring capabilities. This allows you to view critical systems on your boat, get alerts when conditions change and even control relay switches on your boat. This can be done using an app on your phone from a remote location.</p>
VDR	<p>Some transponders support a Voyage Data Recorder (VDR) capability either via internal memory or an SD card plugged into the unit. This automatically logs the AIS and GPS data from your voyage. This is a popular feature for commercial users, predicted log racers and other racing boats allowing the user to replay their past voyages.</p>
VHF antenna splitter	<p>The most popular accessory for an AIS transponder is a VHF antenna splitter. This allows you to safely share your main VHF radio antenna with your AIS transponder and VHF radio. Modern splitters are fully automatic, have zero loss for reception via integrated amplifiers and simplify installation. Some transponders have integrated VHF antenna splitters. Or you can get a splitter as part of a bundle or purchased separately. Antenna splitters should not be used on mandated vessels with Class A AIS.</p>
GPS antenna bundled	<p>AIS transponders are required to use their own integrated GPS system which is built into the transponder unit. Note, the AMEC CAMINO-108 products can also use GPS data from a NMEA 0183 source or a NMEA 2000 network. The integrated GPS system needs to be connected to a GPS antenna in order to work. Some units have a GPS antenna embedded inside the transponder case. Other units require an external GPS antenna to be connected to the GPS antenna port on the transponder. Existing GPS antennas intended for use with other types of marine equipment, such as chartplotters, are not compatible with AIS transponders.</p>
NMEA multiplexing	<p>Some AIS transponders can multiplex inbound NMEA 0183 or NMEA 2000 data (such as heading, depth, wind) and output AIS, GPS and the other multiplexed marine data via a Wi-Fi or USB interface. With this capability users can see all of the combined data using supported apps and software on connected devices.</p>
Integrated screen	<p>Some transponders have an integrated display screen for showing AIS data and other vessel information. This feature is popular with users who have older pre-AIS chartplotters and boaters who want a dedicated screen just for viewing AIS targets.</p> <p>All units with integrated displays can also be used with other displays via NMEA, USB or in some cases Wi-Fi.</p>
IP rating	<p>Most transponders have some level of protection against dampness, splashing and dust. The IP rating lets you know how much dust and water protection the unit has.</p>
Warranty	<p>All AIS transponders have at least a one-year warranty to cover repair due to manufacturer defects. Some manufacturers go beyond a year. Note, warranties do not cover damage due to installation errors, lightning or misuse.</p>
Price	<p>Check the product page for the current product price and bundle deals. Milltech Marine provides free vessel info programming and pretesting for all Class B transponders we sell. Milltech Marine has a price match guarantee for all Vesper, AMEC, em-trak and Comar transponders. Show us a lower published price and we will match it.</p>