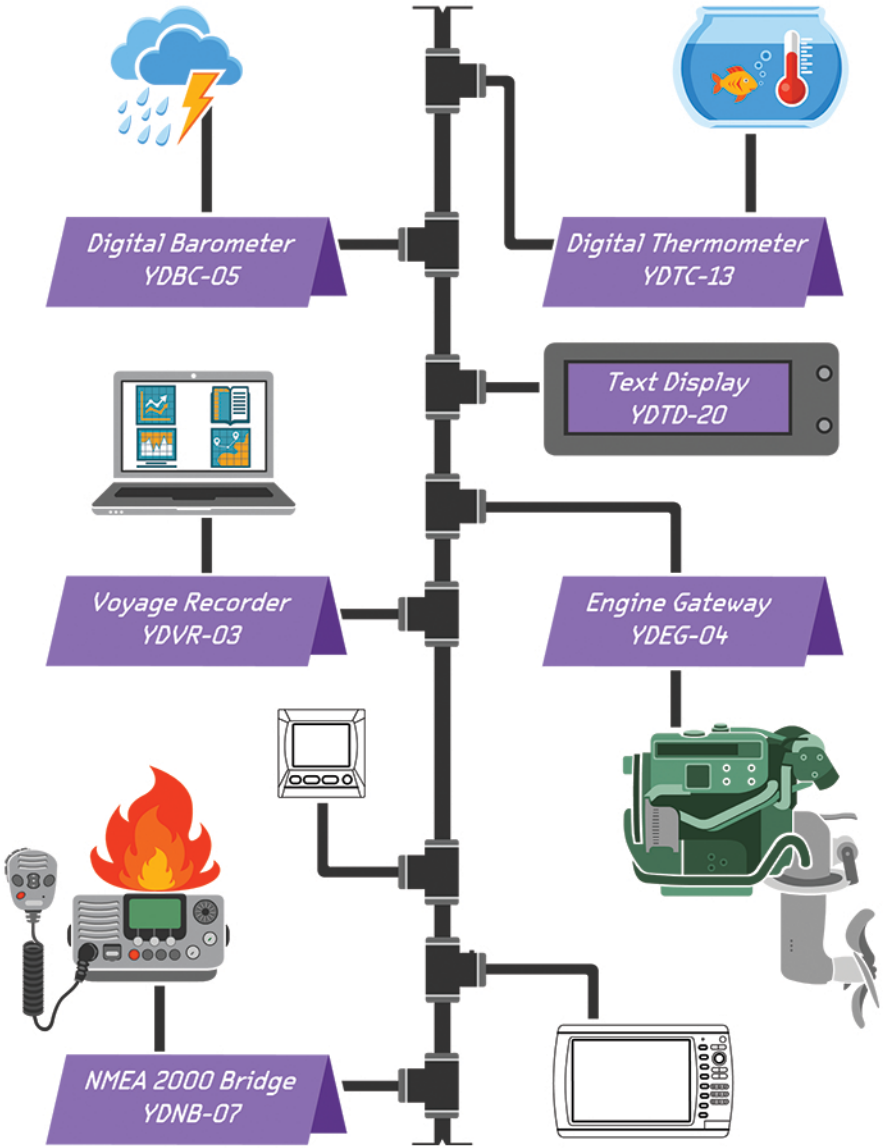
Yacht Devices

sailors for sailors



WWW.YACHTD.COM

ENGINE GATEWAY YDEG-04

Gateway for Volvo Penta and J1939 engines to NMEA 2000 marine electronics network. It will provide you with engine revolutions, motor hours, coolant temperature, battery voltage, warning and alarms, fuel rate and other data on the screen of your chart plotter.

The data shown on the chart plotter depends on the engine controller and number of installed sensors. Legacy chart plotters may not support display of all data types.

Supported data types:

Engine speed, RPM	Boost pressure	Engine warnings and alarms
Total engine hours	Engine oil pressure	Percent engine load
Coolant temperature	Engine oil temperature	Percent engine torque
Coolant pressure	Fuel tank level	Transmission gear
Battery voltage	Fuel rate	Transmission oil pressure
Alternator potential	Fuel delivery pressure	Transmission oil temperature

Reasons to buy:

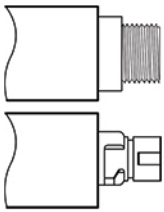
- duplicate or replace broken instruments;
- in combination with a wifi-enabled chart plotter, you'll be able to monitor your engine from any cabin;
- log engine and fuel usage by crew or renters if a recording device like Voyage Recorder is outfitted;
- record your engine data to apply for service remotely.

Features:

- low cost installation, no extra cables required: a 6-pin Deutsch Y-connector is built-in;
- easy configuration with a simple text file on MicroSD card;
- high-voltage galvanic isolation between J1939 and NMEA 2000 interfaces;
- only listens to J1939 network;
- J1939 data recording for diagnostics and configuration;
- special support for Volvo Penta D1 and D2 engines;
- up to 8 engines and transmissions, 8 batteries and 10 fuel tanks are supported by one device.

Power: 1) NMEA 2000: 10..16 V, 38 mA [1 LEN]; 2) J1939: 10..30V, 13 mA.
NMEA 2000 PGNs: RX 59392, 59904, 60928; TX 59392, 60928, 126464, 126996, 127488, 127489, 127493, 127505, 127508.
Case length (without connector): 54 mm. Cable length: 500 mm.

ERP USD $ 189



VOYAGE RECORDER YDVR-03

Voyage Recorder keeps GPS tracks, wind, depth, temperature, AIS and all other data which flow through the NMEA 2000 network on SD card. Never forget exciting moments of your voyages, have proof of strong winds and great storms, accumulate data for future voyages, analyze your races, generate logbooks and diagnose problems.

The Recorder writes all NMEA 2000 data into the memory card and supports all message types broadcasted through the network by any other equipment present on the vessel's network.

How to view the data?

The software that comes with the Recorder is available for Microsoft Windows, Mac OS X and Linux. It allows export of data into the following formats:

GPX files with the vessel's track and extensive information about sailing conditions, including weather, depth, engine, and even tracks of nearby vessels with AIS. GPX files can be viewed in Google Earth, Garmin MapSource and other cartographic applications. They can also be loaded into newer models of Garmin and Raymarine chartplotters.

XML, OpenSkipper, CanBoat and Signal K data formats. Marine electronics specialists can diagnose network problems using free and open source OpenSkipper. This product can "replay" NMEA 2000 recordings and has an excellent log viewer. You may load Voyage Recorder data to OpenSkipper and decode NMEA 2000 messages.

CSV files to open data in spreadsheet applications like Microsoft Excel or LibreOffice Calc to visualize data using charts and build the graphic reports.

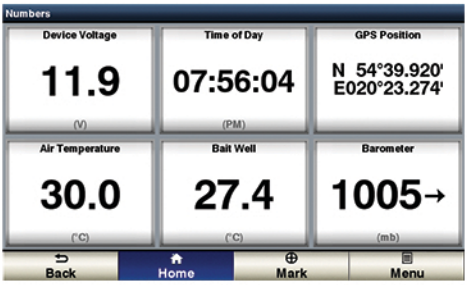
Printable logbook file. With Voyage Recorder software you can get a real multi-page, editable and printable logbook of your voyage with just a few mouse clicks.

Technical details:

Operating voltage (from an NMEA 2000 network)	10.5..16 V
Average current consumption	23 mA
Operating temperature range	-25..+85 °C
Recommended MicroSD card	Class 10, 16-32 GB
Estimated recording capacity for 16 GB	100..200 days

Power: 10.5..16 V, 23 mA. Load Equivalency Number: 1 LEN.
NMEA 2000 PGNs: TX 59392, 59904, 60928, 126464, 126996; RX 59392, 59904, 60928, 126996, 129033, (ALL).
Case length (without connector): 54 mm.

ERP USD $ 189



DIGITAL BAROMETER YDBC-05

The digital Barometer is intended for measuring atmospheric pressure within the range from 300 to 1100 hPa (mbar). Many chartplotters and digital navigation instruments are able to display data on pressure in the form of graphs or show **a trend indicator**; this allows tracking of weather change.
The Barometer doesn't require any configuration or maintenance, just plug the device into the network backbone and it starts working.

DIGITAL THERMOMETER YDTC-13

The digital Thermometer performs measurements within the range from -55 to +125°C, the sensor is placed on a flexible, 95 cm wire in a sealed stainless steel sleeve and can be used to measure the temperature of gases **or liquids**. If necessary, the wire can be elongated up to 100 meters.
The Thermometer can be configured by the user to display data as "Air temperature", "Sea temperature", "Temperature in the refrigerator", "Bait well", etc.

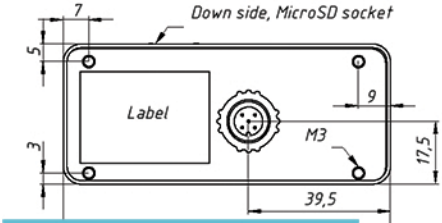
Several devices can be installed on the network to measure data in different places. Data from a Barometer and Thermometer can be displayed on any number of chartplotters and digital navigation instruments, and used by other digital equipment in the vessel.

The Devices are designed for operation in an NMEA 2000 network and are compatible with a wide range of equipment supporting this protocol. Raymarine SeaTalk NG, Simrad SimNet, and Furuno CAN networks are branded versions of NMEA 2000 and differ only by connector type. Garmin uses the NMEA 2000 Micro connector in its devices, which is compatible with the DeviceNet Micro connector. Devices are supplied with different types of connectors, making it possible to connect them to networks of different manufacturers without any adapters.

Technical details:	YDBC-05	YDTC-13
Measurement range	300..1100 hPa	-55..+125 °C
Absolute measurement accuracy, max	± 1 hPa at 0..+65 °C	± 0.5 ° at -10..+85°C
Absolute measurement accuracy in the rest of the range	± 2.5 hPa	± 2 °C
NMEA 2000 data output resolution	0.01 hPa	0.01 °C

Power: 7..16 V, 24 mA. Load Equivalency Number: 1 LEN.
NMEA 2000 PGNs. RX: 59392, 59904, 60928, 129044, 127258. TX: 59392, 60928, 126464, 126996, 130310, 130311 (YDTC only), 130314 (YDBC only).
Case length (without connector): 40 mm.

ERP USD $ 99



TEXT DISPLAY YDTD-20

Text Display is a small and useful instrument display for NMEA 2000 network, a reasonable choice as an additional instrument display that can be mounted in a cabin, engine room or near a chart table.

Unlike budget displays which usually perform one function (wind only, or speed only, etc.) Text Display YDTD-20 shows all significant boat data. Thanks to the set of firmware, the Display can be transformed to a specialized display to show data which is not displayed by other devices.

Instrument Display firmware	Engine and Tank Monitoring Firmware
Date & Time	Engine Speed, RPM (up to 4 engines)
Vessel's position	Engine & transmission alerts and warnings
Course and Speed Over Ground	Engine Coolant Temperature and Pressure
Speed Through Water and Heading	Engine & Transmission Oil Temperatures
True Wind Speed and Angle	Fuel Delivery Pressure & Fuel Rate
Apparent Wind Speed and Angle	Engine & Transmission Oil Pressures
Water temperature and depth	Charging System Potential (Voltage)
Air temperature and atmospheric pressure	Trip data
Log and trip distance	Level in up to four fuels tanks
Battery's voltage	Levels in fresh and black water tanks
Port and starboard engines revolutions	Status of up to four batteries

The Display allows sliding through data pages very quickly using the two buttons on the side. In the Display's settings, the user can turn off unused data pages and choose preferred units. A MicroSD slot is provided to make firmware modifications and upgrades as simple as possible. It allows to anyone to change the Display type. It is also possible to order custom firmware to monitor specific NMEA 2000 equipment.

The Display is not waterproof, so it should be mounted a dry place.

Typical power consumtion: 7..16 V, 20 mA [1 LEN]. Dimensions without connector (mm): 91 x 39 x 16. NMEA 2000 PGNs. Any firmware RX: 59392, 60928, 126464, 126992, 126996, TX: 59392, 59904, 60928, 126464, 126996. Instrument Display RX: 127250, 127258, 127488, 127508, 128259, 128267, 128275, 129025, 129026, 129033, 130306, 130310, 130311, 130312, 130314.

ERP USD $ 149

```
match(CAN1, 0x1F50B00, 0x1ffff00)
{
   A = get(DATA+1, UINT32)
   if (A < 0xFFFFFFFF-20) {
     set(DATA+1, UINT32, A + 20)
   }
   send()
}
```

NMEA 2000 BRIDGE YDNB-07

Yacht Devices NMEA Bridge unifies two physical NMEA 2000 networks into a single logical network, smoothly exchanging messages between them. The Device also supports filtering and processing of transmitted messages.

NMEA Bridge allows you to:

- **Bypass the physical limits** of NMEA 2000 networks concerning length of networks (100 meters for regular cable and 250 meters for heavy or mid-type cable) and concerning the maximum number (50) of physical devices attached to the network. On a network with address capacity of 252, multiple bridges can be engaged to expand to nearly 250 physical devices.

- **Isolate devices from each other.** Using the simple filter, you can block transmission of all or of selected messages from a given device in a separate subset.

- **Ensure proper functioning of equipment.** Using a 2- or 3-line script you can adjust data from the depth-sounder, or "delete" invalid data in messages from broken equipment.

- **To ensure compatibility of equipment of different generations.** You can create any type of NMEA 2000 messages based on data from other messages in the network.

- **Diagnose malfunctions in the NMEA 2000 network.** The Device can record network messages and debug data from custom programs on a MicroSD card in a text file. You can view the data in a standard text editor on a smartphone or tablet with a MicroSD slot, there is no need for a computer. You can even create and edit programs for the Device right on your phone!

- **Safely connect devices that do not meet NMEA 2000 standards.** One of the CAN-interfaces on the device has high-voltage galvanic isolation and can operate at a higher supply voltage.

- **Independently create gateways** for networks based on CAN protocol operating at a speed of 250 kbps. The programming language of the device is not designed for full-fledged applications, but one can create, for example, a gateway from a J1939 network to NMEA 2000.

Programming the device requires knowledge of NMEA 2000, which can be obtained from the National Marine Electronics Association: http://www.nmea.org.

Power: 1) CAN1: 9..16 V, 38 mA [1 LEN]; 2) CAN2: 9..30V, 13 mA [1 LEN].
NMEA 2000 PGNs: RX 59392, 59904, 60928, (ALL); TX 59392, 60928, 126464, 126996, (ALL).
Case length (without connector): 54/40 mm. Cable length: 500 mm.

ERP USD $ 189