

模拟式主机监测系统 (Yanmar)

- 将模拟式信息转换为 NMEA 2000® 数字式信息
- 如果主机附加有传感器,即可转换下列信息
 - ✓ 转速,运转小时,水温,机油压力与增压压力,电压,主机操控角度
- 如果主机附加有开关,即可转换下列信息作为主机警报之用
 - ✓ 燃料,增压,冷却液液位与温度,油压,排气温度
- 直接连接主机线路接头
- 可与模拟式量表一起使用

EMS100 Analog Engine Monitoring System

Maretron's EMS100 plugs directly into engine wiring harnesses and converts analog signals such as water temperature and oil pressure to the new marine digital interface (NMEA 2000®). Critical engine data is then distributed throughout the vessel over a single cable where it can be monitored by any NMEA 2000® compatible display.

The EMS100 is compatible with existing instrument panels and key switches so you don't need to remove them while upgrading to newer digital technology. For new installations, the EMS100 and a compatible NMEA 2000® display can replace the traditional analog instrument panel.



The EMS100 provides these functions:

- Tachometer
- Engine Hours
- Coolant Water Temperature
- Engine Oil Pressure
- Boost Pressure
- Charging Voltage
- Drive Trim
- Fuel Filter Alarm
- Boost Alarm
- Coolant Water Level Alarm
- Engine Oil Pressure Alarm
- Exhaust (Salt Water Flow) Alarm
- Coolant Water Temperature Alarm

The EMS100 is compatible with these Yanmar engines (other engines supported soon, check our web page www.maretron.com):

- GM Series
- YM Series
- JH Series
- LH Series
- LP Series
- LY Series

Products

PART NUMBER	DESCRIPTION
EMS100-01	Analog Engine Monitoring System
EMSWH01	Yanmar Harness

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流体流量监测模块 (FFM100)

- 监测两个独立的流量计 (汽油主机) 或单一柴油主机的两个流量计
- 流量计直接由 NMEA 2000® 网络供电
- 透过内建温度传感器来做实际温度补偿
- 因应喷油泵脉冲的逆流侦测与补偿
- 正向位移式的流量计, 不需要如同涡轮式流量计使用顺流器 (Flow Conditioning), 也就脉冲平缓器和拉直器 (Straighteners)
- 配件 - 燃油流量计



FFM100 Fuel/Fluid Flow Monitoring

Maretron's FFM100 provides precision fuel flow information to help optimize fuel consumption, which can save thousands of dollars in fuel operating cost. The FFM100 uses state-of-the-art, positive displacement metering technology for unprecedented accuracy. In fact, the accuracy of the FFM100 is nearly that of commercial vessel systems costing tens of thousands of dollars, yet the FFM100 costs less than existing recreational systems found on the market today. Additional benefits of the positive displacement metering technology are the elimination of flow conditioning components such as straighteners and pulsation dampers. Other increase system and installation cost. The FFM100 also uses true temperature compensation with embedded temperature sensors within the meters. The returning fuel is generally hotter than the supply fuel and if not properly compensated, inaccuracies as much as 5% can occur in computing the engine's fuel consumption. The FFM100 also detects momentary reverse flow in the fuel lines due to fluctuating pressure caused by the injection pump. Less accurate systems count the reverse fuel flow as part of the consumed fuel where the FFM100 properly accounts for momentary reverse flow. Lastly, the FFM100 can be used for fluid types other than fuel (e.g., water, oil, etc.) by ordering the appropriate flow sender.



The following accessories are available for the FFM100:



M1RSP-2R-EB



M2RSP-2R-EB



M4ARP-2-EB

PART NUMBER	DESCRIPTION
FFM100-01	Fuel Flow Monitor
M1RSP-2R-EB	Fuel Flow Sender 20 to 200 HP (0.53 to 26.4 GPH, 2 to 100 LPH)
M2RSP-2R-EB	Fuel Flow Sender 200 to 1000 HP (4 to 132 GPH, 15 to 500 LPH)
M4ARP-2-EB	Fuel Flow Sender 1000 to 3000 HP (48 to 396 GPH, 180 to 1500 LPH)





Vessel Monitoring & Control Systems

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- FFM100 converts a variety of flow senders (e.g., fuel, water, etc.) to NMEA 2000® Network Data
- All flow senders ordered separately depending on application (i.e., single fuel flow sender for gas engine, dual fuel flow senders for diesel engine, water flow sender for sea water, etc.) reduced fuel operating cost
- Fuel flow senders use positive displacement metering technology for superior accuracy over other measurement technology such as turbine meters
- Fuel flow senders do not require costly fuel conditioning components like flow straighteners and pulse dampers
- Fuel flow senders implement true temperature compensation with precision built-in thermistors for increased accuracy
- Fuel flow senders automatically detect reverse flow due to fluctuating pressure difference from injection pumps
- Fuel flow senders pass particle sizes up to 70 micrometers (diesel fuel filters normally filter down to 2 micrometers to prevent clogging injectors)

连接 J1939 到 NMEA 2000® 的网关

- 连接到任何 J1939 的主机, 传动系统, 或发电机, 包括
 - ✓ Caterpillar, Cummins, Detroit Diesel, John Deere, Kohler, Northern Lights, Onan, Perkins, Steyr, Volvo Penta, Yanmar, etc.
- 转换下列的 J1939 信息到 NMEA 2000® 信息, 用来显示在兼容的设备上 (Furuno, Garmin, Maretron, Raymarine)
 - ✓ 交流发电机的电流, 频率, 和电压, 转速, 运转小时, 冷却液压力和温度, 机油压力和温度, 燃油消耗率, 等.
- 作为 Dometic 空调与制冰机的界面
 - ✓ 监测与设定室温, 控制模式以及风扇速度

J2K100 J1939 to NMEA 2000® Gateway

Maretron's J2K100 attaches directly into J1939 networks of compatible engines, transmissions, and gensets and converts the J1939 data to the new marine digital interface (NMEA 2000®). Critical engine, transmission, and genset data is then distributed throughout the vessel over a single cable where it can be monitored by any NMEA 2000® compatible display.

The J2K100 converts the following information:

- AC Generator Current
- AC Generator Frequency
- AC Generator Voltage
- Tachometer
- Engine Hours
- Coolant Pressure
- Coolant Water Temperature
- Engine Oil Pressure
- Engine Oil Temperature
- Boost Pressure
- Fuel Rate Monitoring
- Charging Voltage
- Percent Engine Load
- Percent Engine Torque
- Rated Engine Speed
- VIN
- Software ID
- Transmission Gear
- Transmission Oil Pressure
- Transmission Oil Temperature

The J2K100 is compatible with any engine, transmission, or genset equipped with a J1939 interface, including products from the following manufacturers:

- Caterpillar
- Cummins
- Detroit Diesel
- John Deere
- Kohler
- Northern Lights
- Onan
- Perkins
- Steyr
- Volvo Penta
- Yanmar

The J2K100 can also be used as part of a complete fuel computer. Simply connect the J2K100 together with Maretron universal displays (DSM200/DSM250/N2KView®) and GPS antenna/receiver (GPS100) and you have a system capable of displaying gallons per hour and/or miles per gallon.




Products

PART NUMBER	DESCRIPTION
J2K100-01	J1939 to NMEA 2000® Gateway
MCF-3M-01	J2K100 3-pin Micro Female to Distributor 4 Pin 2 Meter Cordset
CF-2M-012	J2K100 3-pin Micro Female to Distributor 1.2 Pin 2 Meter Cordset
MCF-3M-01 250'	J2K100 3-pin Micro Female to Distributor 1.2 Pin 2.5 T cable

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