

# M200 series

## Monitoring System w/Secure Start®

### for Yanmar Mechanical Engines

## YANMAR LP/LY2/CX ENGINES



**got data?**



**Plug 'N' Play Harnessing  
On-Engine Mounting  
Digital Engine Data  
Fuel Level Inputs  
Engine Alarms  
Alarm Log**



The M200 Series Product is designed as a Plug 'N' Play data monitoring system for Yanmar LP/LY2 Engines. With integrated engine start/stop capability, this system replaces your outdated gauge and ignition panels by converting traditional analog data to J1939 or NMEA 2000® data. Installation is quick and easy as the M200 Engine Interface Module connects and mounts directly to the engine.

#### FEATURES

- 12 Volt Operation
- Available w/J1939 or NMEA 2000
- On Engine Mounting
- Rocker Switch Main Ignition Panel
- Rocker Switch Main Ignition Panel w/Glow (optional)
- Key Switch Ignition Panel w/Glow (optional)
- Second Helm Rocker Switch Ignition Panel
- Alarm Horn at Helm w/ext Output (2A)
- Maintenance Timer 50 hr (initial)+ 125hr
- Configurable for VDO or Yanmar sender inputs
- "Secure Start®" Engine Security
- Configurable US vs. Euro Fluid Level Senders
- Provides NMEA CANBus power
- Alarm Log (timed stamped)
- Alarm Acknowledge via EIS Display
- Fuel Tank Characterization (optional)

#### Inputs Measured

- Battery Voltage
- Boost Pressure
- Coolant Temperature
- Oil Pressure
- Engine Speed
- Fluid Level (2 inputs)
- Rudder Angle
- Trim

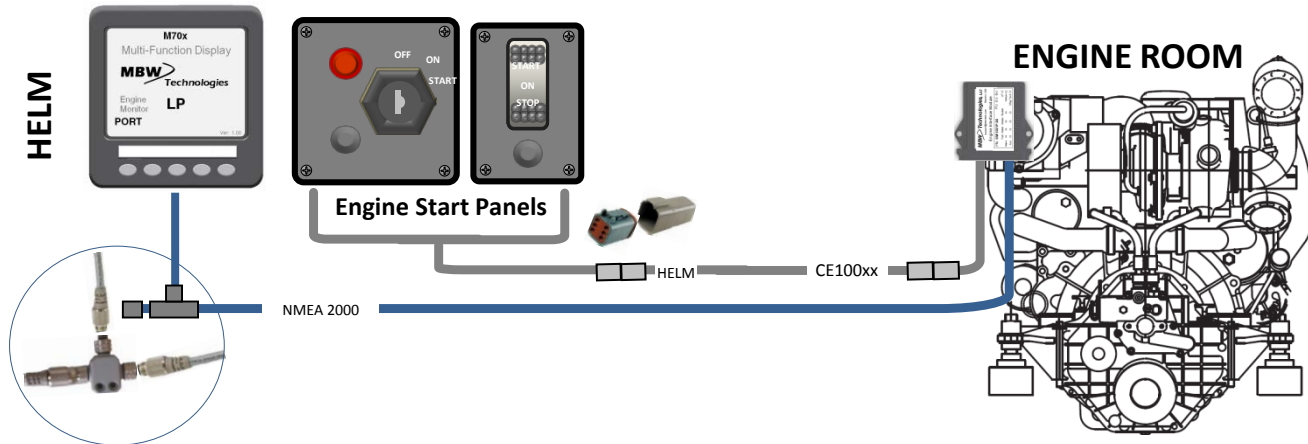
#### Alarm Data

- Battery Voltage (low)
- Coolant Temperature (high)
- Oil Pressure (low)
- Low Coolant Level (low)
- Gear Oil
- Water-in-Fuel (high)
- Charge Indicator

Part Number	Description (LP as shown)
M701G-5X	Display, Eng Monitor, Single
CP10000-XX	Panel, Rocker, Ignition, Main Helm
EM1001G-5X	EM, Eng Interface, LP
CE10027-XX	Harness, EIM to Helm, 27' [8m]
1000009-XX	Plate, Mounting, EIM-LP
MN10002-5X	Installation / User Manual
MN10003-5X	M200 LP Data Sheet

Part Number	Description (NMEA 2000 as shown)
CM10060	'T'; Devicenet
CM10030	Harness; Devicenet, 30' [9m]
CM10051	Terminator; Devicenet, Male
CM10052	Terminator; Devicenet, Female

# M200 System Single Engine (LP)



## Standard and Optional Components

- M701 Display
- Electronics Interface Module (EIM)
- On Engine Mounting Plate (except LY2)
- Plug 'N' Play Engine to Helm Harness
- Harnessing Required
  - Key Switch to EIM
  - EIM mates directly w/engine connectors (Yazaki)
  - Second Helm extension harness; if required
- Main Helm Keyswitch ignition panel w/Glow (optional)
- Main Helm Rocker switch ignition panel (Glow optional)
- Main Helm to Second Helm extension harness
- Second Helm 'Y' harness
- Second Helm Rocker switch ignition panel
- Ignition security switch (optional)
- Audible Alarm
- 10A Ignition Power Fuse
- NMEA 2000 Network Power Fuse 3A
- Key-On Accessory Circuit Breaker 3A
- NMEA 2000 Devicenet style connections
- Fuel Flow (optional)

## NMEA Data Transmitted

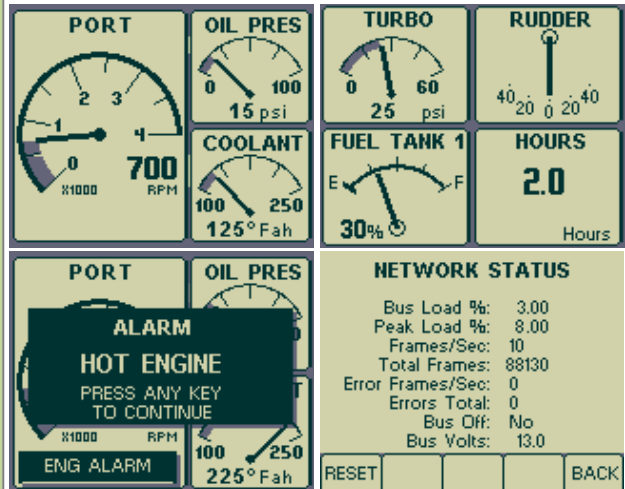
PGN 127488	Engine Parameters, Rapid
PGN 127489	Engine Parameters, Dynamic
PGN 127493	Transmission Parameters, Dynamic
PGN 127245	Rudder
PGN 127505	Fluid Level; Fuel / Water / Waste
PGN 127508	Battery Status
PGN 126996	Product Information
PGN 126208	Configuration Information
PGN 060928	ISO Address Claim
PGN 059392	ISO Acknowledge
PGN 059904	ISO Request

## NMEA Data Received

PGN 129026	COG & SOG, Rapid Update
PGN 128259	Speed
PGN 127505	Fluid Level

- Backlit FSTN, 160x128 pixel
- 10 to 32 VDC
- Adjustable Contrast and Backlight
- Soft Function Keys
- Flexible Display Configuration
- Devicenet NMEA 2000® Connection
- Network Status Monitor
- Engine Alarm / Data Viewing
- M200 System Configuration

## M701 Display



## Environmental Specifications

Operating Voltage	10-16 VDC polarity protected
Operating Temperature	-18C to +77C
Storage Temperature	-40C to +85C
Vibration	ABYC P-24
Corrosion/ Salt Spray	300 Hrs per ASTM B117
Humidity Test 100 Hours	ABYC P-24 +77C and 90-95% relative Humidity
Transient Voltage Test	ABYC P-24 SAE J1113-12
Electrostatic Discharge Test	ABYC P-24 8Kv/4Kv
EMI Emissions	ABYC P-24
EMI Immunity	ABYC P-24

## WARRANTY

Two (2) year limited warranty on materials and workmanship for electronic modules and displays. One (1) year limited warranty on materials and workmanship for electrical cables and connectors.