

# EMS467 Monitoring System



## Features

- Internet Ready
- Field Adjustable Parameters
- First-Out Shutdowns and/or Alarms
- Shutdown History File
- Service Reminders
- Four Communications Ports
- External PC Card Reader and Modem Ready
- Back Lit Alpha Numeric Display
- Flash Programmable

The EMS467 Electronic Monitoring System/Controller is micro-processor based for monitoring and control of equipment functions. It is especially suited to tasks requiring remote modem or SCADA communications. The four built-in communication ports provide a variety of communications capabilities.

Basic programs provide selectable auto or manual start/stop and first-out shutdown for engine functions such as pressure, temperature, level and overspeed. Time delays for lock out during start up are included. The EMS467 can be applied as an RTU to interface between SCADA applications and other control platforms.

With an inexpensive wireless data modem attached, the EMS467 can be used for remote monitoring and control through the Internet. The unit can send emails, serve web pages, and transmit data to remote servers.

An external PC card reader can be used with the EMS467 to log data from flow meters, pressure transmitters, electric gauge senders, and other sensing devices. This is a popular application in the flood control market.

Operating data is displayed on a 32 character back lit alphanumeric liquid crystal display. An on-board real-time clock keeps a log of equipment running hours and alerts you when to change oil, filters and perform other routine service.

The EMS467 operating parameters are configured through a simple three-button interface. Access to the system memory is controlled by entry codes.

A password-protected program uses built-in memory to display the alarm/shutdown history, including a display of the last ten shutdowns, when and why they occurred, and displays all of the engine operating conditions at the time of last shutdown.

## Communications

The EMS467 has one RS485, one RS232, and two J1939 CAN communication ports. By using these ports and the necessary software, you can monitor and control your equipment from a remote location.

With the CAN ports, you can communicate to an electronic engine and display engine operation information on the display.

## Sensor Inputs

**Electric Gauge Senders:** Accepts Murphy or equivalent resistance type senders (the use of two-wire type senders is strongly recommended). **Note:** Is field selectable for end of line 4-20 ma or 0-5 VDC input.

**Digital Inputs:** Accepts eight opto-isolated bi-polar inputs (positive or negative), typically wired to external shutdown switches.

**Frequency Input:** The optically-isolated speed sensing input senses a speed signal from a magnetic pickup.

## Specifications

### Input Voltage

- 9 to 28 VDC

### Communications

- 1 – RS485 port
- 1 – RS232 port
- 2 – J1939 CAN ports

**Digital Inputs:** 8 optically isolated inputs (positive voltage or ground)

**Analog Inputs:** 8 inputs – 7 of the inputs are field selectable to read resistive sender, end of line 4-20 ma, or 0-5 VDC. One input is dedicated for battery monitoring.

**Frequency Input:** 1 optically isolated input for speed reference.

**Transistor Outputs:** 7 rated at 200 mA sinking

**Analog Output:** 0.5 VDC to 4.2 VDC depending on the load

### Environmental

**Operating Temperature:** -4 to 149°F (-20° to 65°C)

**Storage Temperature:** -4 to 149°F (-20° to 65°C)

**Display:** Alphanumeric 2-line, 32 character, back lit

### Weights and Dimensions

The EMS467 should be mounted in a location that is accessible to the operator. The EMS467 requires a rectangular mounting hole, and sufficient rear clearance for wiring connections.

**Enclosure:** Aluminum case 1/4 DIN type

**Product Weight:** 2.25 lbs. (1.02 kg.)

**Product Dimensions:** 5.7" x 4.35" x 2.65"  
(144 x 110 x 67 mm)

**Shipping Weight:** 3 lbs. (1.4 kg.)

**Shipping Dimensions:** 9.25" x 8.25" x 5.25"  
(235 x 210 x 133 mm)

## Accessories

The EMS467 comes in an extruded aluminum enclosure suitable for panel mounting. Wiring is via optional wiring harness. Relay boards are available for additional relay contact capability, see listings below:

**EMS25RM:** Rail mount DIN type terminal block.

**EMS25CAR2:** Ribbon cable with 2 male D-sub connectors.

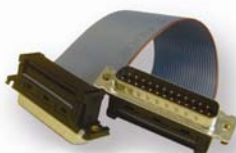
**EMS25TBCAR2:** Ribbon cable with 1 male and 1 female D-sub connector.

**S449-1:** Dry Contact Relay Board for EMS467 models.

**S449-3:** Transistor Digital and Dry Contact Relay Board for EMS467 models.



EMS25RM



EMS25CAR2



S449-3

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**Warranty** - A limited warranty on materials and workmanship is given with this FW Murphy product. A copy of the warranty may be viewed or printed by going to [www.fwmurphy.com/support/warranty.htm](http://www.fwmurphy.com/support/warranty.htm)