

# MTH6 - Digital Tachometer and Hourmeter With Adjustable Overspeed Set Point

This microprocessor-based digital tachometer and hourmeter with a built-in overspeed switch is highly accurate and dependable. It measures speed and running hours and can give an alarm or shut down the engine on overspeed.

The MTH6 case is polycarbonate, and its dial measures 3-1/2 in. (89 mm) in diameter.

RPM data for the tachometer and overspeed switch is supplied by a magnetic pickup or battery charging alternator. The magnetic pickup is installed into the flywheel housing of an internal combustion engine. The starter ring gear acts upon the magnetic pickup to generate a voltage pulse each time a gear tooth passes the end of the sensor.

During normal operation, the MTH6 displays RPM. Its five-digit, liquid crystal display is updated every second. When the MTH6 is displaying hours and a speed signal is present, the far left digit and decimal point will flash indicating the hourmeter is operating.

The overspeed set point and running hours can be viewed by manipulating three membrane switches located on the MTH6 front panel. When the overspeed set point is met, an LED located on the front panel lights.

## Specifications

Power Requirements: 8-40 VDC (12, 24 or 32 VDC systems) Maximum Current:

12 VDC: 0.011 A, backlight Off; 0.025 A, backlight On 24 VDC: 0.008 A, backlight Off; 0. 015 A, backlight On 32 VDC: 0.007 A, backlight Off; 0. 010 A, backlight On **Operating Temperature:** -4° to 158° F (-20° to 70° C)

Storage Temperature: -40° to 185° F (-40° to 85° C)

Case: 1018 Polycarbonate/Polyester blend

Mounting Hole Dimensions: 3-3/8 in. (86 mm) Dia

Speed Input: 4.5 Vrms minimum

Overspeed Switch Rating: 2 A, 50 VDC

Overspeed Range: 0 to 9000 RPM

Pulses per Revolution: 4 to 255

Tachometer Range: 0 to 65,535 RPM

Tachometer Accuracy:

 $\pm 1\%$  of the display reading or -2 RPM whichever is greater

Input Frequency Range: 25 Hz to 20 kHz

Hourmeter Range: 0 to 99999 hrs

Hourmeter Resolution:

 $\pm 0.1$  Hour up to 9999.9;  $\pm 1$  hour 10,000 and up

**Reset Hourmeter:** 

Apply temporary ground to terminal #5 to reset hours to zero

Shipping Weight: 14 oz. (435 g)Shipping Dimensions:  $5 \cdot 1/2 \times 5 \cdot 1/2 \times 5 \cdot 1/2 \text{ in.} (140 \times 140 \times 140 \text{ mm})$ 



# Applications

- Industrial Engines
- Generators
- Compressors
- Oil Field Equipment
- Marine Engines

# Dimensions

#### 15/32 in. (12 mm) MUHIPIPHY 3-5/8 in. (92 mm) Diameter (12 mm) Mounting Bracket (89 mm) Diameter 3-3/8 in. (89 mm) Diameter Mounting bracket (89 mm) Diameter (90 mm) (90 mm)



Vehicles

- Farm Equipment
- Construction Equipment

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## **Easy Calibration**

The MTH6 calibration is simple. The operator enters the number of pulses per engine revolution and the overspeed set point value using the membrane-switches located on the front of the MTH6.

## Typical Wiring Diagram



### How to Order

Options listed below. All configurations may not be available. Call your sales representative or Enovation Controls for more information.

