



Description

For those requiring either tachometer (RPM) functions or frequency measurement in Hz, the Model 63 LCD Rate Indicators offer the user the solution. With a 5-digit LCD display, and front panel programmability, the Model 63 is flexible for use in many applications, and it is capable of interfacing to Dry Contact, Low Voltage DC, and High Voltage AC/DC inputs.

Capable of measuring up to 30,000 RPM the Tachometer is capable of being programmed for use with one- or two- cycle engines. The Frequency indicator is capable of measurements up to 500 Hz, making it perfect for 50, 60, and 400 Hz applications.

Features

- Tachometer measures up to 30,000 RPM
- Frequency measurements for 50, 60, and 400 Hz applications
- Choice of external power or 15+ year internal lithium battery
- Choice of Switch (no voltage), 3-30VDC, 20-300VAC, and 10-300VDC inputs
- Programmable scale factors for interfacing with one- and two-cycle engines
- Open-drain MOSFET output

Specifications

<b>Display:</b> Figures: 5 reflective LCD digits 0.32" [8mm] high	<b>Mounting:</b> Panel with clip
<b>Inputs:</b> Switch (no voltage)	<b>Terminations:</b> Terminal block
DC Voltage Absolute voltage range: -0.5 VDC, minimum to 30.0VDC, maximum VIH 3.0 VDC, maximum VIL 1.0 VDC, minimum	<b>Weight:</b> 2 oz. [57g]
High Voltage AC/DC: Absolute Maximum voltage: 300VAC/VDC VIH: 10VDC/20 VAC, max. VIL: 3VDC/3 VAC, minimum	<b>Environmental:</b> Temp. (Storage & Operating): -4°F to + 140°F [-20°C to +60°C] Humidity: 0 to 95% RH, non-condensing
<b>Scale Factors:</b> 0.5 pulses per revolution, 1 pulse per revolution, and 2 pulses per revolution. Units can be factory or user programmed by optional front panel switches.	<b>Vibration:</b> Operating: 10 to 55 Hz, 0.01" [0.25mm] double amplitude Non-operating: 10 to 55 Hz, 0.03" [0.75mm] double amplitude
<b>Accuracy:</b> Resolution Dependent, better than 1% for inputs greater than 700RPM or 12 Hz.	<b>Shock:</b> Operating: 10G's Non-operating: 30G's
<b>Power:</b> Internally powered models: Self powered (15+yr battery) Externally Powered models: 5-28 VDC , externally supplied Absolute Maximum external power: 30.0 VDC	<b>Dielectric:</b> 1000 VAC 50/60Hz for 1 minute
<b>Output:</b> Format: Open-Drain MOSFET with Source connected to Common (see note 3) Maximum Withstanding voltage: 30VDC, reference to Common Maximum Load current: 0.1Amp	<b>Accuracy:</b> 100% (provided signal meets stated parameters)
<b>EEPROM:</b> (When installed) 40 years, externally powered Maximum data writes: 100,000	<b>EMC Compliance:</b> EN61326:1997 with A1: 1998 & A2:2001 for industrial environments
	<b>Enclosure:</b> NEMA 4/4X, 12, & IP66 compliance (from the front) when properly mounted using the optional gasket
	<b>Approvals:</b> CE compliant, UL & cUL recognized
	<b>Environmental Compliance:</b> Compliant to the European WEEE & RoHS Directives



Rate Indicator Types

**Tachometer:** Displayed resolution is one RPM. The maximum rate that the unit can measure is 30,000 RPM. The unit can also be programmed to vary the "scale factor" for the tachometer input to RPM's for one and two-stroke engines.

**Frequency Meter:** The Model 63 can measure frequency from 0-500 Hz, making it ideal for 50, 60 and 400 Hz applications.

Functions

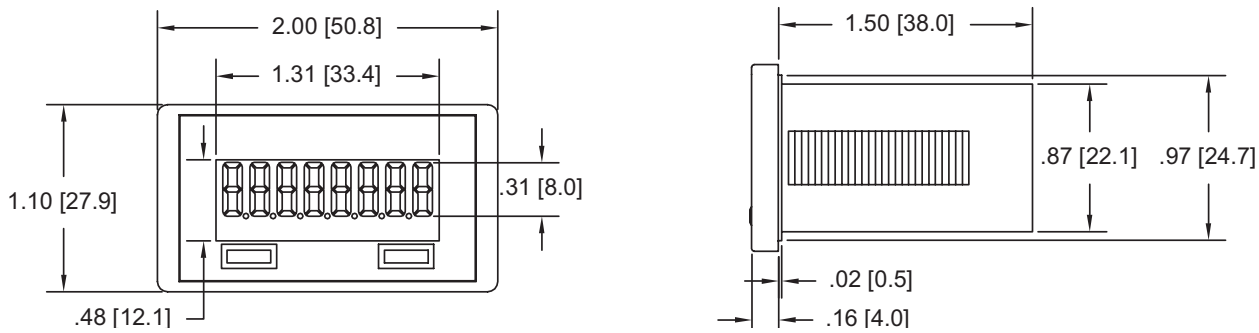
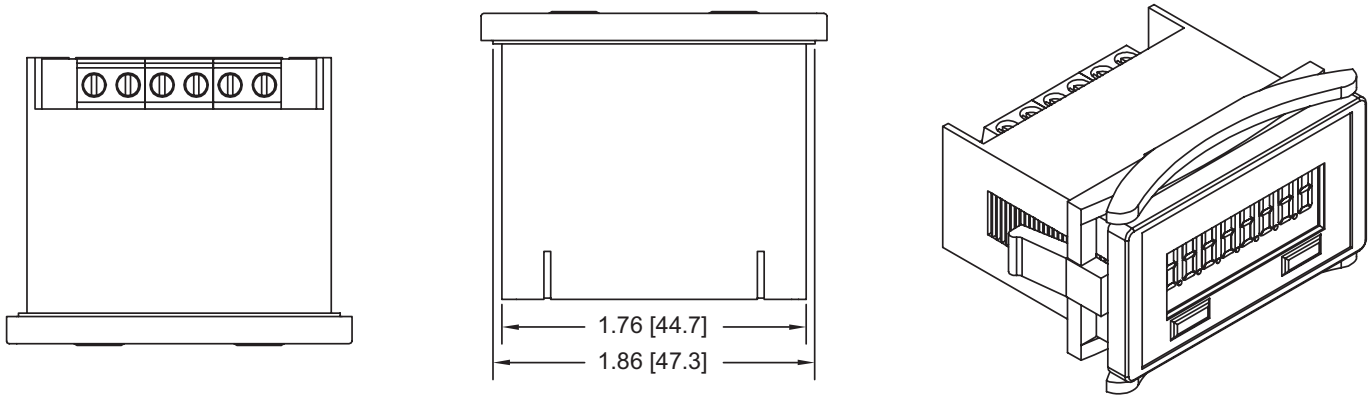
**Front Panel Switch Functions:** Front panel switches can be used for reset, display selection and programming.

**SEL:** The background function is displayed while this switch is pressed and held during normal operation. During programming, this switch is used to select options.

**RST:** This is the reset switch during normal operation, during programming the RST switch is used to enter an option.

**Unit Programming:** Units with front panel switches can be field programmed for a scale factor that can be programmed to comply with one and two-stroke engines.

Dimensions



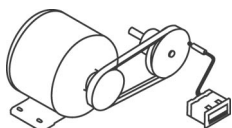
**Panel Cutout: 1.79" [45.5mm] x 0.89" [22.6mm]**  
**Recommended Panel Thickness: 0.875" [22.2mm]**

Notes

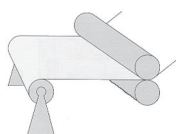
- 1. When interfacing the Model 63 with a Solid State Relay or AC Sensor, the leakage current needs to be considered. Contact the factory or see the application note at [www.redingtoncounters.com](http://www.redingtoncounters.com) for further information.
- 2. The Absolute Voltage Range and the Absolute Maximum Voltage are the voltages at which operation beyond the specified limits may result in damage to the unit.
- 3. Operates like open-collector NPN. Care should be taken when interfacing to this input since there is no current limiting protection in the counter.

Applications

Motor/Pulley Speed



Rate Indication



Speed Control

