

SOLID STATE BATTERY 'FUEL' GAGE & HOUR METER

802 SERIES

CURTIS



DESCRIPTION

Model 802 is a combination battery 'fuel' gage and solid state hour meter housed in a single 52mm diameter case. Void of moving parts, this two-in-one unit provides exceptional reliability even in severe operating conditions.

WARRANTY

One year from date of delivery.

Application

Model 802's dual voltage feature makes it ideal for material handling applications, including forklift truck manufacturers and parts dealers trying to ease their stocking requirements. These high quality gages are also advantageous on sweeper/scrubbers, aerial lift platforms and personnel carriers.

'Fuel' Gage Features

- A multicolor, 10-bar LED displays state of charge.
- A flashing light signals "energy reserve" alarm at 70% of discharge.
- A double flashing light signals "empty" alarm at 80% of discharge.
- Recognizes improperly charged battery.
- Keyswitch activates display (Fuel gage electronics are energized as long as they remain connected to system battery).
- Internal battery with typical 10-year life retains fuel gage's memory when external power is removed.

Hour Meter Features

- Monitors use-time throughout equipment's lifespan.
- Records and displays up to 99999.9 hours on LCD, rolls over and continues to count and display.
- Stores latest total in EEPROM nonvolatile memory, without need of external power or internal battery.
- Operates and displays in temperatures from -40°C to +65°C under harsh conditions of vibration, shock, moisture and dust.
- Accuracy of $\pm 0.1\%$ throughout its operating temperature range.
- Flashing hour-glass icon signals hour-meter accumulation of time.

System Voltages

Available in single voltages from 12 VDC to 80 VDC, or in dual voltage of 24/36, 36/48, 24/48 or 72/80 VDC. Operating range is $\pm 25\%$ of nominal voltage.

Technical Specifications

Note: The following data covers both 'fuel' gage and hour meter.

Current consumption:	65mA maximum @ 48 V nom.
Weight:	Less than 3.5 oz
Operating temperature:	-40°C to +65°C
Storage temperature:	-50°C to +90°C
Shock:	SAE J1378 55g
Vibration:	SAE J1378 20g
Humidity:	95% RH (non-condensing) at 38°C

Model Number Description

802RBwwxxBG or 802RBwwxxBN

ww = lower of the two voltages for dual voltage units, or none for single voltage units.

xx = voltage of single voltage unit or higher of the two voltages for dual voltage units.

Discharge profile:

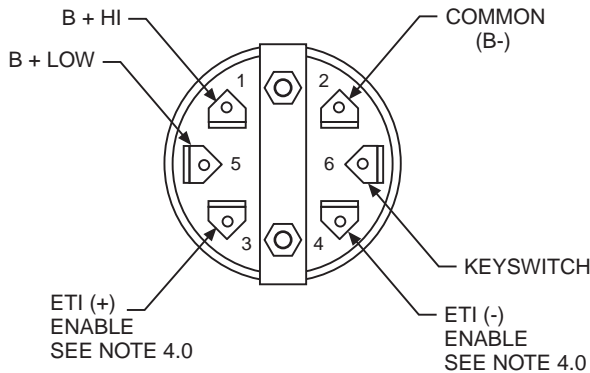
BG = for electric vehicles that have a discharge profile ranging from 1.97 to 1.75 volts per cell.

BN = for electric vehicles that have a discharge profile ranging from 2.04 to 1.73 volts per cell.

Reset voltage:

If power is broken to the battery 'fuel' gage during charging, the unit will reset at 2.09 volts per cell. If the battery 'fuel' gage remains connected during charging, a voltage of 2.35 volts per cell must be maintained in excess of six minutes in order to reset the gage.

Dimensions: mm (inches)



NOTES:

1.0 Mating terminal: .25 inch x .032 inch tab (ANSI/NEMA).

2.0 OEM'S are supplied with hex nuts and lock washers only. They do not receive thumbnuts, or terminals.

3.0 Curtis 802 Meters are provided in a standard round package for mounting in 2 1/16 inch dash panel hole.

4.0 Provision has been made for either a positive enable (terminal 3) or a negative enable (terminal 4) for accumulation of hours.

