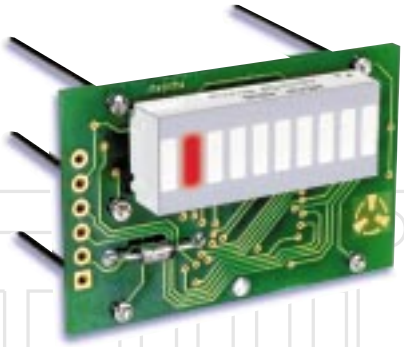
LED ENGINE GAGE MINI MODULES

MODEL 2100P SERIES

1960-2000

CURTIS



DESCRIPTION

A solid state, circuit board mountable LED engine gage module, based on a custom integrated circuit. The series includes temperature, battery charge, pressure and fuel gage modules. Their small size and programmability make them ideal for those designing custom instrument panels.

WARRANTY

Three years from date of delivery.

Application

Perfect for panels and instrument clusters, these circuit board mountable modules can be used to display virtually any engine function. Ideal for construction, agricultural and material handling vehicles or stationary equipment such as generators, compressors and irrigation pumps.

Features

- Easy to read tri-colored, 10 bar LED display for instant "status at a glance" reading.
- Eye catching flashing red LEDs indicate operation beyond established parameters, such as under and over voltage.
- Small footprint allows for panels of small size and depth.
- Each of the ten display LEDs is factory programmable by Curtis to allow for customized monitoring including regions of expanded resolution, to enhance areas of special interest. For example, an expanded "normal voltage" region allows the vehicle operator to notice alternator problems before they become serious.
- Programmable to interface with a wide variety of sender inputs - resistive, voltage or current based. These modules can accept virtually any input device.
- Two logic level output signals - one at the high end of the display and one at the low end - can be used to activate external alarms or shut down equipment when operating ranges have been exceed. Ideal for unsupervised equipment.
- Single LED pointer display mode.
- Advanced design delivers significant performance improvement over electro-mechanical gages.

Specifications

OPERATING TEMP. RANGE	-40°C to +85°C
STORAGE TEMP. RANGE	-50°C to +90°C
MECHANICAL SHOCK	SAE J 1378 March 83. Amplitude 44-55g, half sine, 9-13ms duration.
VIBRATION	SAE J 1378 March 83. Double amplitude of 1.53mm with frequency sweep for 10-80-10 Hz (20g max) at 1 minute intervals.
SIGNAL OUTPUT FORMAT	Logic level, 0 to 5V or 5V to 0, programmable. Capable of sinking or sourcing 50 µA, max.
OPERATING VOLTAGES	
Models 2111P, 2112P, 2113P	12VDC nominal (9VDC to 16 VDC range)
	24VDC nominal (18VDC to 32VDC range)
Model 2114P	12VDC nominal (8VDC to 18VDC range)
	24VDC nominal (16VDC to 36VDC range)

Model Encodement

2111
Model number

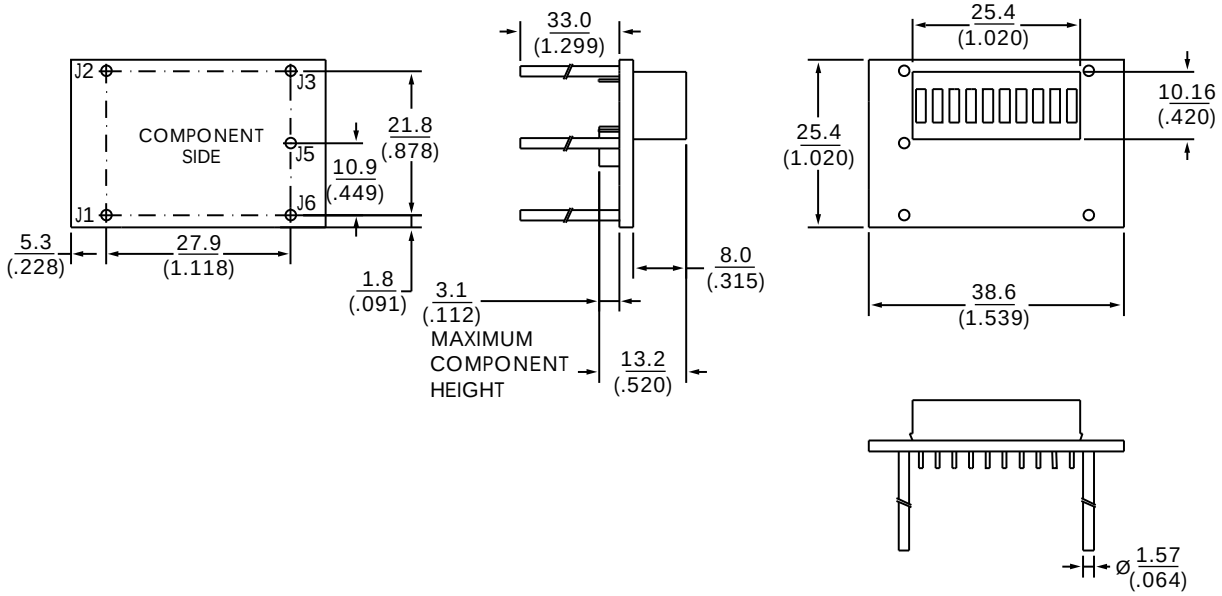
2111 = temperature
2112 = fuel
2113 = pressure
2114 = battery charge (volts)

P
Printed circuit board mountable module

12
Voltage

-0001
Sequential number identifies programming

Module Dimensions: mm (inches)



Options

Larger footprint module available with expanded features, allowing for additional rising bar graph display mode and power-saving sender power modulation features. Contact Curtis for more details. An LCD version is available for maximized visibility in bright sunlight.

Pin Assignment

J1	Sender (not connected for model 2114)
J2	Battery +
J3	Ground
J4	Not connected
J5	Higher output
J6	Lower output