

TYPE: PMD-STRAIN



PMD-STRAIN Load Cell/Strain Gauge Input Panel Mounting Display

Description

The PMD-STRAIN is a panel mounting display for use with strain gauge bridge based sensors, including load cells, load pins etc. This series of display offers very simple operation and configuration. The PMD-STRAIN does not use a menu system to configure and calibrate the display, making installation and commissioning very straightforward.

To simplify commissioning even further, the product instruction manual provides step by step pictorial details for each function that you may want to configure, saving time searching through an overly complex manual trying to find that one parameter that you wish to change.

The main application for the PMD-STRAIN is for simple crane weighing applications, hoist and winch monitoring, as well as many other force measurement applications. Different input signals are available including serial input (see PMD-SERIAL), process input (see PMD-PROCESS). LCM Systems engineers will be pleased to discuss your specific application requirements with you. They will be able to advise on the correct product selection, options required and advise on suitable sensors, where required.

Specification

Power supply	100-240V AC (optional 11-30V DC)
Power rating	10 watts maximum
Load cell excitation voltage	5V DC (max 40mA) or 10 V DC (120mA max)
Load cell bridge resistance	125Ω using 5 V DC excitation, 83Ω using 10 V DC excitation
Load cell sensitivity	±4mV/V maximum
Input resistance	>10MΩ
Accuracy	<±0.05%
Zero temperature coefficient	<25ppm/°C
Span temperature coefficient	<30ppm/°C
Filtering	Selectable time constraints from 0-25 seconds
Display update rate	10 readings per second
Internal resolution	1 part in 400,000
Display range	-199999 to +199999
Connections	All user/installation connections using detachable field screw terminals
Case material	Black polycarbonate
Storage temperature	-20 to +70°C
Operating temperature	0 to +50°C
Environmental sealing	IP65
Weight	300g

Available Options

- Cover (part number SPC4, increasing sealing to IP67)
- Power supply options: 100-240vac and 11-30vdc.
- Output options: 4-20mA, 0-10v, ±10v, 2 relay alarms, 4 relay alarms, RS232 or RS485.

Features

- Suitable for most standard wheatstone bridge sensors
- Menu free setup and calibration
- 14.2mm high red LED display
- AC or DC powered versions
- Wide choice of analogue, relay or digital outputs
- All option boards are pluggable and can be retro-fitted
- IP65 sealed (option for IP67 sealing)

Typical Applications

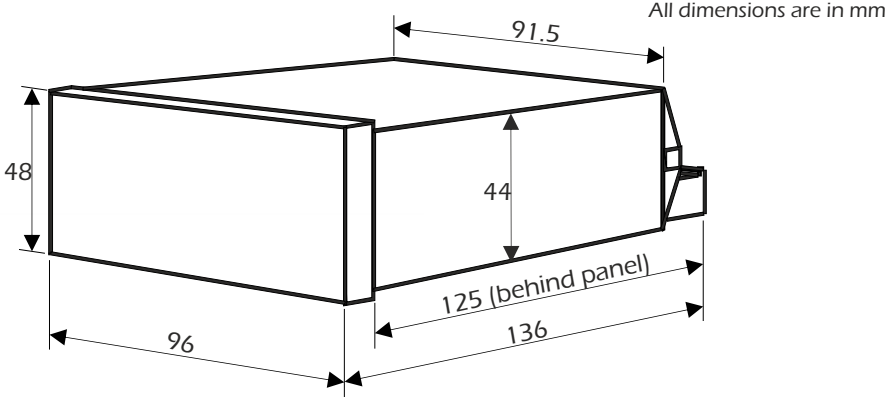
- Vessel weighing
- Winch monitoring
- Crane weighing
- Module weighing
- General force measurement

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Dimensions



Panel cutout should be 92mm wide x 45mm high, +1mm, -0mm 1/8 DIN. Depth behind panel 125mm max, including cables.



Ordering Guide

Create a full part number like this:-

Model	Analogue Output		Alarm Output		Serial Data Output		Supply Voltage	
PMD-STRAIN	No output	-0	No alarms	-0	No data	-0	100-240V AC	-AC
	4-20mA	-ANI	2 alarms	-AL2	RS232	-232	11-30V DC	-DC
	-10V	-ANV	4 alarms	-AL4	RS485	-485		
	±10V	-ANB						

PMD-STRAIN				
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Example - PMD-STRAIN display with 4-20mA output, 2 alarms, RS485 output and 110V AC powered
Order code will be: PMD-STRAIN-ANI-AL2-485-AC

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Due to continual product development, LCM Systems Ltd reserves the right to alter product specifications without prior notice.

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APPROVED

(unapproved if printed)