

PMD-PROCESS Voltage & Current Input Panel Mounting Display

Features

- Suitable for most process analogue current and voltage signals
- 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

Description

The PMD-PROCESS is a panel mounting display for use with most industry standard voltage & current analogue process signals.

This series of display offers very simple operation and configuration. The PMD-PROCESS 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.

Options valuable for the PMD-PROCESS include:-

Input options available include 0-10v, 0-5v, 1-5v, 0-10mA, 0-20mA and 4-20mA

Power supply options available include 95-265vac, 11-30vdc and 48vac.

Output options available include 4-20mA, 0-10v, ± 10 v, 2 relay alarms, 4 relay alarms, RS232 or RS485.

The main application for the PMD-PROCESS is for simple crane weighing applications, hoist and winch monitoring, as well as many other force measurement applications. It can be connected to any of LCM Systems load cell products, with integrally mounted amplifiers.

Different input signals are available including Serial input (see PMD-SERIAL), load cell/strain gauge bridge input (see PMD-STRAIN). 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.

Specifications

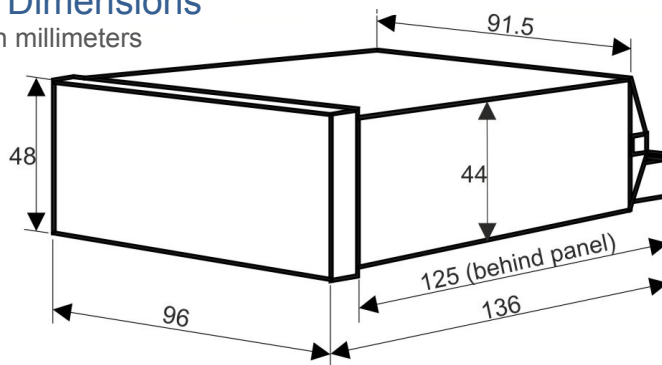
Power Supply:	95-265vac Optional 11-30vdc or 48vac
Power Rating:	10 watts maximum.
Input Signals:	DC Voltage: 0-10v, 0-5v, 1-5v DC Current: 0-10mA, 0-20mA, 4-20mA
Excitation Voltage:	24vdc (60mA maximum current) 10vdc (20mA maximum current)
Input Resistance:	1Megohm for voltage inputs 33ohms for current inputs
Accuracy:	$\leq \pm 0.05\%$
Zero Temperature Coefficient:	$< 25 \text{ ppm}/^\circ\text{C}$
Span Temperature Coefficient:	$< 30 \text{ ppm}/^\circ\text{C}$
Filtering:	Selectable time constants 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 (optional cover, Part Number SPC4, increases sealing to IP67)

PMD-PROCESS Voltage & Current Input Panel Mounting Display

TYPE: PMD-PROCESS

Mechanical Dimensions

All dimensions in millimeters



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

Example of Simple Manual Instructions

Theoretical Cal. - Decimal Point & Full Scale

This is when you type in the sensor's theoretical signal level at the top and bottom of its range and the value to display, for each signal level.



If you have not done so before, please select Theoretical Calibration mode from the **Meter Calibration** page AND choose whether your input is current or voltage.

First we recommend you set the **FULL SCALE** calibration ...

This feature is available in Easy and Advanced Modes

- Press 3 seconds. Lockout Switch must be OFF. **Done!**
- Display shows **THEOR** followed by **DC R** or **DC V**, depending on whether you have chosen current or voltage input, then **IN HI**.
- You can now specify the maximum input signal. Use DIGIT to select each digit in turn, and the UP or DOWN arrow to increase or decrease each digit's value, as required. eg set **20.0000** if your input is 4-20mA.
- Display now shows **RD HI** briefly. You can now specify the maximum reading and decimal point position. Press Set2 button for 3 seconds to set decimal point position. Use up and down arrows to move the decimal point and press OK when done. Then, use DIGIT to select each digit in turn, and the UP or DOWN arrow to increase or decrease each digit's value, as required. eg set **100.000** if your display range is 0 to 100.000.
- Done!**

Theoretical Calibration - Low end calibration

This is when you type in the sensor's theoretical signal level at the top and bottom of its range and the value to display, for each signal level.

If you have not done so before, please select Theoretical Calibration mode from the **Meter Calibration** page.

This feature is available in Easy and Advanced Modes

- Press 3 seconds. Lockout Switch must be OFF. **Done!**
- Display shows **THEOR** followed by **DC R** or **DC V**, depending on whether you have chosen current or voltage input, then **IN LO**.
- Press OK. You can now specify the lowest input signal. Use DIGIT to select each digit in turn, and the UP or DOWN arrow to increase or decrease each digit's value, as required. eg set **04.0000** if your input is 4-20mA.
- Display now shows **RD LO** briefly. You can now specify the low reading. Use DIGIT to select each digit in turn, and the UP or DOWN arrow to increase or decrease each digit's value, as required. eg set **000.000** if your display range is 0 to 100.000.
- Done!**

You can set Zero first, if you prefer, but you will not be able to change the decimal point position in the ZERO calibration step. This will not be an issue if your zero calibration reading is 0, but may become confusing otherwise.

Product Order Codes

Ordering Guide. Create a full part number like this:-

Model	Analogue Output	Alarm Output	Serial Data Output	Supply Voltage
PMD-PROCESS	No output -0 4-20mA -ANI 0-10V -ANV +/-10V -ANB	No alarms -0 2 alarms -AL2 4 alarms -AL4	No data -0 RS232 -232 RS485 -485	95-265VAC-AC 11-30VDC -DC 48VAC -48VAC

Example - PMD-PROCESS display with 4-20mA output, 2 alarms, RS485 output and 110vac powered.

Order Code will be PMD-PROCESS-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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