

Features

- Intelligent, compact, stackable microprocessor for smarter automation and process control.
- Fully isolated standard analogue outputs 4-20mA and 0-10V.
- Full digital setup and easy programming via handheld unit or USB connection to a PC using intuitive toolkit software.
- Increase reliability with 2 single pole relays and digital inputs.
- 10-point linearization, providing superior accuracy.
- 6 wire load cell connection to compensate for barrier and cable losses.
- Lockable features prevent loss of device settings through user misuse.
- Configuration can be saved and restored for security of setup.



Description

The LCD20 is a compact DIN rail mount amplifier with relays. The LCD20 is a stackable microprocessor-based unit specifically designed to control and monitor process applications. It offers flexible connection to most load cells, pressure, or strain gauges over a wide range of sensitivities.

The LCD20 provides isolated current 4-20mA and voltage 0-10V analogue outputs and two digital inputs. Two set point relays can be configured to set thresholds such as net, gross, peak and valley. Powered from a wide-ranging DC supply, the LCD20 is supplied with 2-part screw connectors for easy installation.

The LCD20 is suitable for strain gauges and other ratio-metric sensors and will support 6-wire input to compensate for barrier and cable losses. Factory calibrated to mV/V and supporting 10-point user calibration to desired engineering units. Configuration options via handheld programmer or PC Toolkit software.

The analogue outputs and relays interface to existing acquisition and control systems making this unit an ideal partner for any integrated instrumentation system.

The LCD20 load cell amplifier can be used in conjunction with the LCI load cell failure alarm, which is designed to continuously monitor the condition of individual load cells and activate an alarm when faults in the system are detected, therefore providing increased safety and cost savings onsite for all weighing systems. For more information on the LCI, please refer to the LCI Data Sheet.

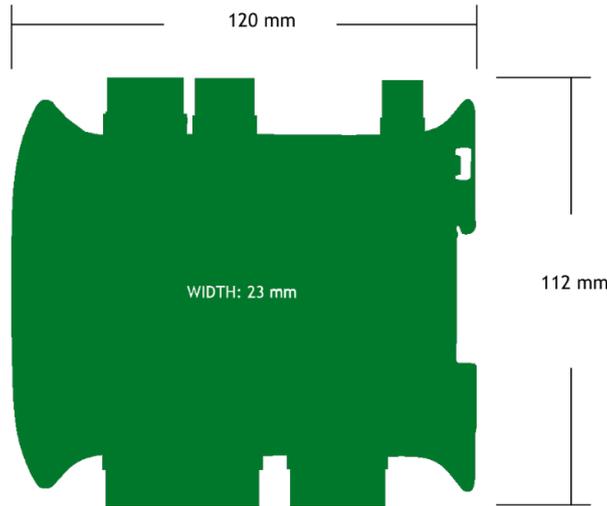
Typical Specification

PARAMETER	VALUE
Isolated Power Supply	9 to 32VDC.
Power	2.5W typical.
Bridge Excitation	4.75 to 5.25V.
Bridge Resistance	85Ω (minimum for 5V excitation).
Bridge Sensitivity	0.5 to 7.8mV/V.
Resolution	1:180,000 (17.5 bits)
Analogue Outputs	4-20mA and 0-10V
Analogue Output Resolution	1:8000 (13 bits)
Relays	2x SPNO
Relay Contact Rating	3A 240V AC / 3A 30V DC
Isolation	±130V RMS or DC to any port.
Storage Temperature	-20 to + 90°C
Operating Temperature <small>4x 350Ω LOAD CELLS</small>	-20 to +70°C
Operating Temperature <small>1x LCI & 4x 350Ω LOAD CELLS</small>	-20 to +60°C
Maximum Humidity	95% non-condensing.
Environmental Protection	IP20

Approvals

PARAMETER	VALUE
EMC Directive	2014/30/EU
Low Voltage Directive	2014/35/EU
EMC Standards	BSEN 61326-1:2013
Low Voltage Standard	BSEN 61010-1-2010

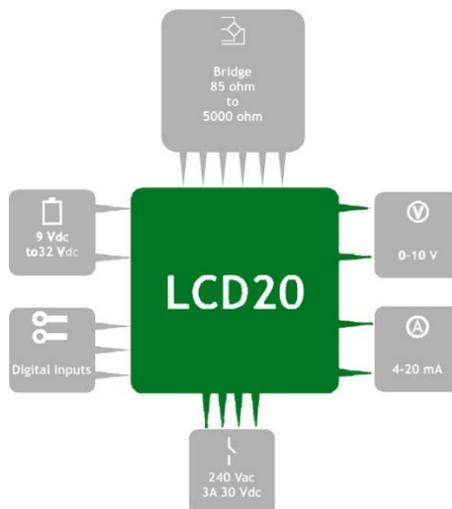
Outline Dimensions in millimetres



Ordering Codes

CODE	DESCRIPTION
LCD20	LCD20 base unit.
PGM1	Programming lead
LP2	Remote programmer.

*When PCM provide you with a quotation you will see an ordering code like this:
"LCD20-PGM1"*



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