



TYPE: LCD20



LCD20 Intelligent Strain Gauge Load Cell Amplifier

Description

The LCD20 intelligent strain gauge bridge amplifier is a compact, 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 unit 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 DIN rail amplifier is supplied with 2 part screw connectors for ease of installation.

The LCD20 will support 6 wire input to compensate for barrier and cable losses. It is factory calibrated to mV/V and allows 10 point user calibration to the desired engineering units. Configuration options are achieved via a 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.

Features

- Standard analogue outputs (4-20mA and 0-10V)
- 2 single pole relays and digital inputs as factory standard
- Provides controls and alarms without the need for additional instrumentation
- 10 point linearisation provides superior accuracy
- Full digital setup and easy programming via a handheld unit or USB connection to a PC
- Lockable features prevents loss of device settings
- Configuration can be saved and restored

Typical Applications

- Vessel weighing
- Silo weighing
- Batch control
- Crane overload protection/ weighing
- Force measurement

Specification

Isolated power supply	9 to 32 Vdc
Power	2.5W typical
Bridge excitation	4.75 to 5.25V
Bridge resistance (minimum for 5V excitation)	85 Ohms
Bridge sensitivity	0.5 to 7.8 mV/V
Resolution	1:180,000 (17.5 Bits)
Analogue outputs	4.20mA and 0-10V
Analogue output resolution	1:8000 (13 Bits)
Relays	2 off SPNO
Relay countacts rating	3A 240V AC / 3A 30V DC
Isolation	+/- 130V RMS or DC to any port
Operating temperature range	-20 to 70°C
Storage temperature range	-20 to 90°C
Maximum humidity	95% non-condensing
IP rating	IP20
EMC Directive	2014/30/EU
Low Voltage Directive	2014/35/EU
EMC standards	BSEN 61326-1:2013
Low voltage standards	BSEN 61010-1:210

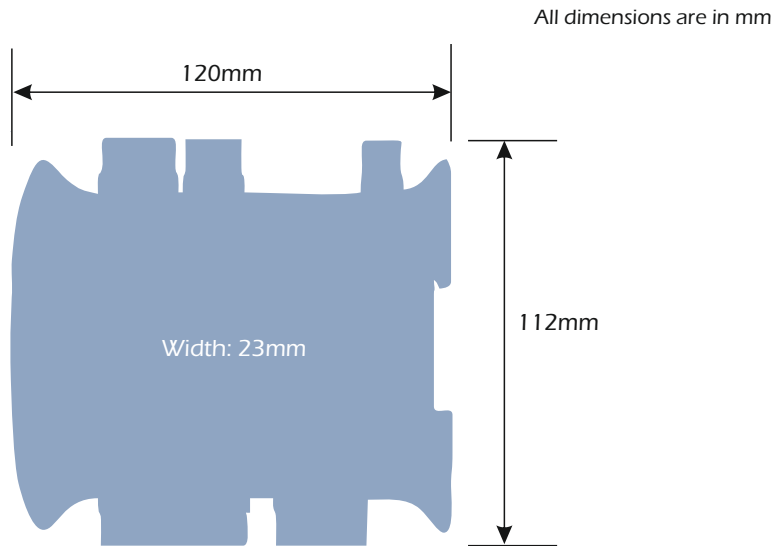
Order codes

Load cell amplifier in DIN enclosure	LCD20
Handheld programmer	LP2
Programming cable for Toolkit	PGM1

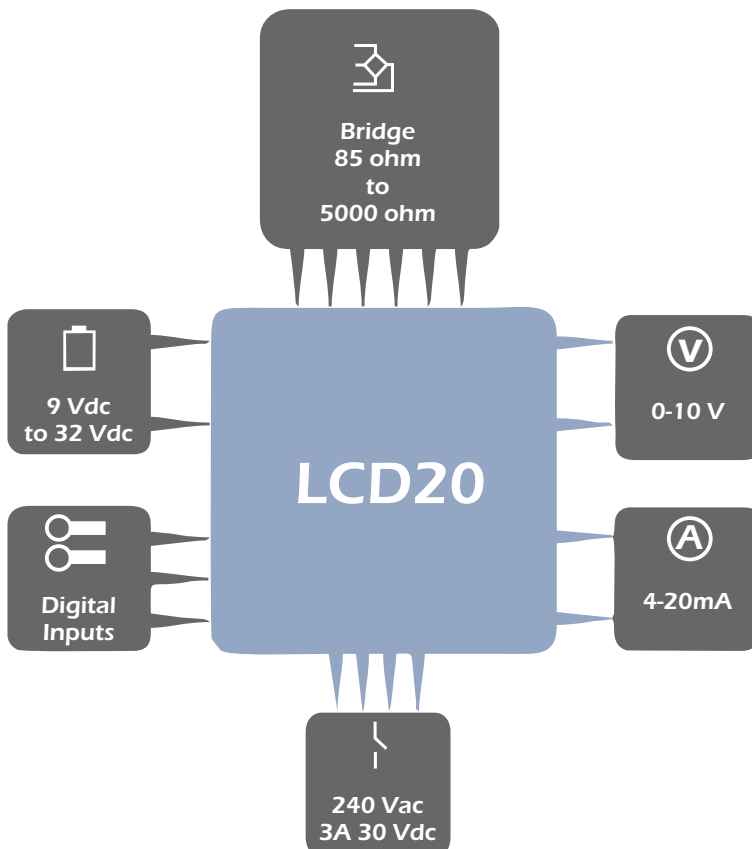


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Dimensions



Electrical



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