



COMING SOON



### DESCRIPTION

- LCB transforms an analog load cell (mV/V output) into a digital one; it can also be used on existing load cells to digitize the weighing system.
- Conceived for IoT applications (Internet of Things).
- PC configuration software via micro USB port.
- Status LED of the communication interface.
- Mounting: wired or integral to the load cell body via standard ¼ GAS fitting (specific adapters for different threads are supplied on request).
- IP67 box in AISI 304 stainless steel or PA66 nylon reinforced with glass fiber (dimensions: 90x40x107 mm including flying connectors).
- Suitable for wall mounting (supports included: 2 fixing holes Ø 6 mm; centre distance: 68 mm).
- 3x IP67 M12 flying connectors included in the supply.
- The instrument can be configured and managed using the free "Instrument Manager" PC software, which you can download from [www.laumas.com](http://www.laumas.com).

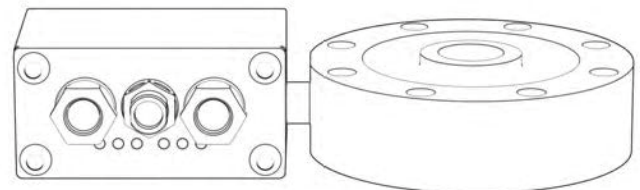
### INPUTS/OUTPUTS AND COMMUNICATION

- 1 micro USB port.
- 3 relay outputs controlled by the setpoint values or via protocols.
- 2 digital inputs: status reading via serial communication protocols.
- 1 load cell input.

SUPPORTS FOR WALL MOUNTING



MICRO USB FOR PC CONFIGURATION



EXAMPLE OF APPLICATION WITH LOAD CELL

### CERTIFICATIONS

- EAC** Complies with the Eurasian Customs Union standards
- UK CA** Equivalent of the CE marking for the United Kingdom

### FIELD BUSES

**MODBUS RTU**

**MODBUS/TCP**

**ETHERNET TCP/IP**

**ETHERNET POWERLINK**

**EtherCAT**

**EtherNet/IP**

**PROFINET**

**PROFINET**

**CC-Link**

**CC-Link IE Basic**

**IO-Link**

**CANopen**

**SERCOS interface**

### INTERFACES AND FIELDBUSES

stainless steel

plastic

#### RS485.

Male M12 circular connector, A-coded, 5-pin.  
 Female M12 circular connector, A-coded, 5-pin.  
 Baud rate: 2400, 4800, 9600, 19200, 38400, 115200 (bit/s).

coming soon

#### RS485 + analog output.

Current: 0÷20 mA; 4÷20 mA (up to 400 Ω).  
 Voltage: 0÷10 V; 0÷5 V (min 2 kΩ).  
 Male M12 circular connector, A-coded, 5-pin.  
 Female M12 circular connector, A-coded, 5-pin.

#### IO-Link.

2x male M12 circular connector, A-coded, 4-pin.  
 The instrument works as *device* in a IO-Link network.

#### CANopen.

Male M12 circular connector, A-coded, 5-pin.  
 Female M12 circular connector, A-coded, 5-pin.  
 The instrument works as *slave* in a CANopen synchronous network.

#### CC-Link IE Field Basic.

2x female M12 circular connectors, D-coded, 4-pin.  
 The instrument works as *slave* in a CC-Link IE Field Basic network.

#### CC-Link.

Male M12 circular connector, A-coded, 4-pin.  
 Female M12 circular connector, A-coded, 5-pin.  
 The instrument works as *Remote Device Station* in a CC-Link network and occupies 3 stations.

coming soon

#### Profibus DP.

Male M12 circular connector, B-coded, 5-pin.  
 Female M12 circular connector, B-coded, 5-pin.  
 The instrument works as *slave* in a Profibus DP network.

coming soon

#### Modbus/TCP.

2x female M12 circular connectors, D-coded, 4-pin.  
 The instrument works as *slave* in a Modbus/TCP network.

#### Ethernet TCP/IP.

Female M12 circular connector, D-coded, 4-pin.  
 The instrument works in an Ethernet TCP/IP network and it is accessible via web browser.

coming soon

#### Ethernet/IP.

2x female M12 circular connectors, D-coded, 4-pin.  
 The instrument works as *adapter* in an Ethernet/IP network.

#### Profinet IO.

2x female M12 circular connectors, D-coded, 4-pin.  
 The instrument works as *device* in a Profinet IO network.

#### EtherCAT.

2x female M12 circular connectors, D-coded, 4-pin.  
 The instrument works as *slave* in an EtherCAT network.

#### POWERLINK.

2x female M12 circular connectors, D-coded, 4-pin.  
 The instrument works as *slave* in a Powerlink network.

#### SERCOS III.

2x female M12 circular connectors, D-coded, 4-pin.  
 The instrument works as *slave* in a Sercos III network.

### MAIN FUNCTIONS

- Connections to:
  - PLC via analog output or fieldbuses;
  - PC/PLC via RS485 (up to 99 instruments with line repeaters, up to 32 without line repeaters);
  - up to 4 load cells in parallel by junction box.
- TCP/IP WEB APP: integrated software in combination with the Ethernet TCP/IP version for remote supervision, management and control of the instrument.
- Digital filter to reduce the effects of weight oscillation.
- Theoretical calibration (via PC software) and real calibration (with sample weights and the possibility of weight linearization up to 8 points).
- Calibration via characterization values of the load cell.
- Tare weight zero setting.
- Automatic zero setting at power-on.
- Gross weight zero tracking.
- Semi-automatic tare (net/gross weight) and preset tare.
- Semi-automatic zero.
- Direct connection between RS485 and RS232 without converter.
- Configuration backup and restore via PC software.

### BASE PROGRAM

- Hysteresis and setpoint value setting.

### SINGLE PRODUCT LOADING PROGRAM

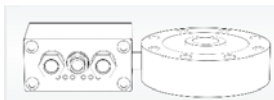
- 99 settable formulas.
- Automatic fall calculation.
- Tolerance error control.
- Precision batching through slow function.
- Precision batching through tapping function.
- Consumption storage.
- Batching start via external contact or fieldbus.

### TECHNICAL FEATURES

Power supply and consumption	12÷24 VDC ±10%; 5 W
Number of load cells • Load cells supply	up to 4 (350 Ω) - 4/6 wires • 3.3 VDC/40 mA
Linearity • Analog output linearity	<0.01% full scale • <0.01% full scale
Thermal drift • Analog output thermal drift	<0.0005% full scale/°C • <0.003% full scale/°C
A/D Converter	24 bit (16000000 points) - 4.8 kHz
Divisions (with measurement range ±10 mV and sensitivity 2 mV/V)	±999999 • 6.6 nV/d
Measurement range	±26 mV
Usable load cells sensitivity	±7 mV/V
Conversions per second	500/s
Decimals • Display increments	0÷4 • x1 x2 x5 x10 x20 x50 x100
Digital filter • Readings per second	3 filter types • 5÷500 Hz
Relay outputs	3 - max 115 VAC/150 mA - 24 VDC/200 mA
Digital inputs	2 - 5÷24 VDC
Micro USB port	B type - USB 2.0 (full-speed)
Humidity (condensate free)	85%
Storage temperature	-30 °C +80 °C
Working temperature	-20 °C +50 °C

### OPTIONS ON REQUEST

#### DESCRIPTION



Load cell + instrument wiring.

*The Company reserves the right to make changes to the technical data, drawings and images without notice.*