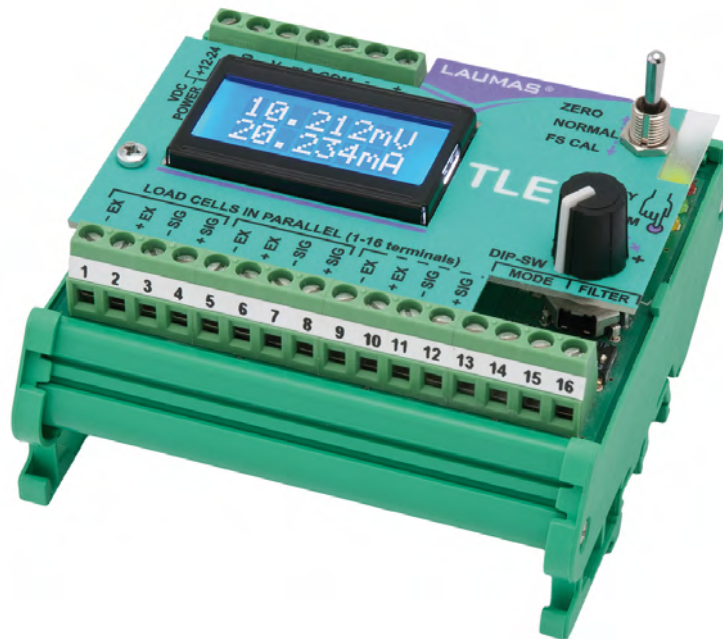



**MODBUS RTU**


## DESCRIPTION

- Weight transmitter suitable for back panel mounting on Omega/DIN rail or junction box (on request).
- Dimensions: 90x95x60 mm.
- Backlit alphanumeric LCD display, two-line by 8-digit (5 mm height), visible area: 38x16 mm.
- 3-way selector switch, DIP-switch and control knob.

## INPUTS/OUTPUTS AND COMMUNICATION

- Current or voltage 16-bit high-speed analog output (response time: 3 ms).
- RS485 serial port for communication via protocols ModBus RTU, ASCII Laumas or continuous one way transmission.
- 4 load cell dedicated inputs.

## MAIN FUNCTIONS

- Connections to:
  - PLC via analog output;
  - PC/PLC via RS485 (up to 99 instruments with line repeaters, up to 32 without line repeaters);
  - up to 8 load cells in parallel by junction box.
- Zero and full scale adjustment without multimeter.
- Simultaneous display of the response signal of the load cells expressed in mV and the value of the analog output.
- Digital filter to reduce the effects of weight oscillation.
- Theoretical calibration (via keyboard) and real calibration (with sample weights).
- Tare weight zero setting.

## CERTIFICATIONS



UL Recognized component - Complies with the United States and Canada standards



Complies with the Eurasian Custom Union standards



### TECHNICAL FEATURES

Power supply and consumption	12÷24 VDC ±10%; 5 W
Number of load cells • Load cells supply	up to 8 (350 Ω) - 4/6 wires • 5 VDC/120 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) - 4.8kHz
Divisions (RS485)	±200000 • 0.01 μV/d (with measurement range ±10 mV and sensitivity 2 mV/V) ±300000 • 0.01 μV/d (with measurement range ±15 mV and sensitivity 3 mV/V)
Measurement range	±39 mV
Usable load cells sensitivity	±7 mV/V
Conversions per second	300/s
Display range	±999999
Decimals • Display increments	0÷4 • x1 x2 x5 x10 x20 x50 x100
Digital filter • Readings per second	8 levels • 10÷ 300 Hz
Serial ports	RS485
Baud rate	2400, 4800, 9600, 19200, 38400, 115200 (bit/s)
Analog output	16 bit = 65535 divisions. 0÷20 mA; 4÷20 mA (up to 300 Ω) 0÷10 V; 0÷5 V; ±10 V; ±5 V (min 10 k Ω)
Humidity (condensate free)	85%
Storage temperature	-30 °C +80 °C
Working temperature	-20 °C +60 °C



Equipment to be powered by 12-24 VDC LPS or Class 2 power source

### OPTIONS ON REQUEST

	DESCRIPTION	CODE
	IP67 polycarbonate box; dimensions: 170x140x95 mm (four fixing holes Ø4 mm; centre distance: 152x122 mm)	
	- transparent lid - transparent lid; 4+2 M16x1.5 cable glands - plugs - transparent lid; 4+2 PVC end-fittings for sheath	CASTL CASTLPG9 CASTLGUA
	ATEX II 3GD (zone 2-22) version - transparent lid; 4+2 PG9 cable glands - plugs	CASTLATEX