









D-SUB connectors - IP40



Universal power supply included 24 VDC/1 A - 100÷240 VAC input 3 m cable length

## DESCRIPTION

- AISI 304 stainless steel desk weight indicator.
- Dimensions: 286x85x206 mm.
- 6-digit semi-alphanumeric red LED display (20 mm height) -16 signaling LED.
- 19-key keyboard.
- IP40 protection rating.
- IP68 front panel protection rating.
- Real-time clock/calendar with buffer battery.
- Power supply included.
- D-SUB connectors.
- The instrument can be configured and managed using the free "Instrument Manager" PC software, which you can download from www.laumas.com.

### **INPUTS/OUTPUTS AND COMMUNICATION**

- 3 serial ports (2x RS485 and 1x RS232) for communication via protocols ModBus RTU, ASCII Laumas or continuous one way transmission.
- 4 relay outputs controlled by the setpoint values or via protocols.
- 2 optoisolated PNP digital inputs: status reading via serial communication protocols.
- 1 load cell dedicated input.

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## MAIN FUNCTIONS

- Connections to:
  - PC/PLC via RS485/RS232 (up to 99 instruments with line repeaters, up to 32 without line repeaters);
  - remote display and printer via RS485/RS232;
  - up to 8 load cells, 350  $\Omega,$  (or 16 load cells, 700  $\Omega)$  in parallel by junction box;
  - intelligent junction box or other multichannel instruments: allow the use of advanced functions as digital equalization, load distribution analysis and automatic diagnostics.
- Double weighing (entry and exit), single weighing (entry or exit), double weighing with trailer, single weighing with trailer, multiple weighing (weighing of multi-compartment trucks).
- Simultaneous management of 254 trucks.
- Open input weighings archive (max 254).
- Database with 999 preset tares.
- Up to 10000 weighings that can be saved in alibi memory.
- Traffic light management via relay outputs.
- Totals management (loaded and unloaded products).
- Printing of displayed weight, open weighings, totals and last weighing done.
- Customizable printouts (header and footer) via PC software.
- Digital filter to reduce the effects of weight oscillation.
- Theoretical calibration (via keyboard) and real calibration (with sample weights and the possibility of weight linearization up to 8 points).

- 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.
- Hysteresis and setpoint value setting.

#### Approved versions for legal for trade use

- System parameters management protected by qualified access via software (password), hardware or fieldbus.
- Weight subdivisions displaying (1/10 e).
- Three operation mode: single interval or multiple ranges or multi-interval.
- Net weight zero tracking.
- Calibration.
- Alibi memory (option on request).
- The following values can be printed via keyboard or external contact: double weighing (entry and exit), single weighing (entry or exit), double weighing with trailer, single weighing with trailer, multiple weighing (weighing of multi-compartment trucks), ID code (alibi memory).

# CERTIFICATIONS

01ML	OIML R76:2006, class III, 3x10000 divisions, 0.2 $\mu$ V/VSI
c <b>SU</b> s	UL Recognized component - Complies with United States and Canada regulations
EAC	Complies with the Eurasian Customs Union regulations
UK CA	Equivalent of the CE marking for the United Kingdom
NMI TRADE	NMI Trade Approved - Complies with Australian market regulations for legal for trade use
	Complies with New Zealand regulations for legal for trade use
	Complies with United Kingdom regulations for legal for trade use
	NTEP - n <sub>max</sub> 10000 - Class III/IIIL - Complies with United States regulations for legal for trade use
PA	Complies with Chinese market regulations for legal for trade use
	CERTIFICATIONS ON REQUEST
¢	Complies with the regulations of the Russian Federation for legal for trade use

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## **TECHNICAL FEATURES**

Power supply and consumption		12÷24 VDC ±10%; 6 W
Number of load cells • Load cells supply		up to 8 (350 $\Omega)$ or 16 (700 $\Omega)$ - 4/6 wires + 5 VDC/120 mA
Linearity		<0.01% full scale
Thermal drift		<0.0005% full scale/°C
A/D Converter		24 bit (1600000 points) - 4.8 kHz
Divisions (with measurement range $\pm 10$ mV and sensitivity 2 mV/V)		±999999 • 0.01 µV/d
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		10 levels • 5÷300 Hz
Relay outputs		4 - max 115 VAC/150 mA
Optoisolated digital inputs		2 - 5÷24 VDC PNP
Serial ports		2x RS485, 1x RS232
Baud rate		2400, 4800, 9600, 19200, 38400, 115200 (bit/s)
Humidity (condensate free)		85%
Storage temperature		-30 °C +80 °C
Working temperature		-20 °C +60 °C
	Relay outputs	4 - max 30 VAC, 60 VDC/150 mA
		,
c <b>FL</b> us	Working temperature	-20 °C +50 °C

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

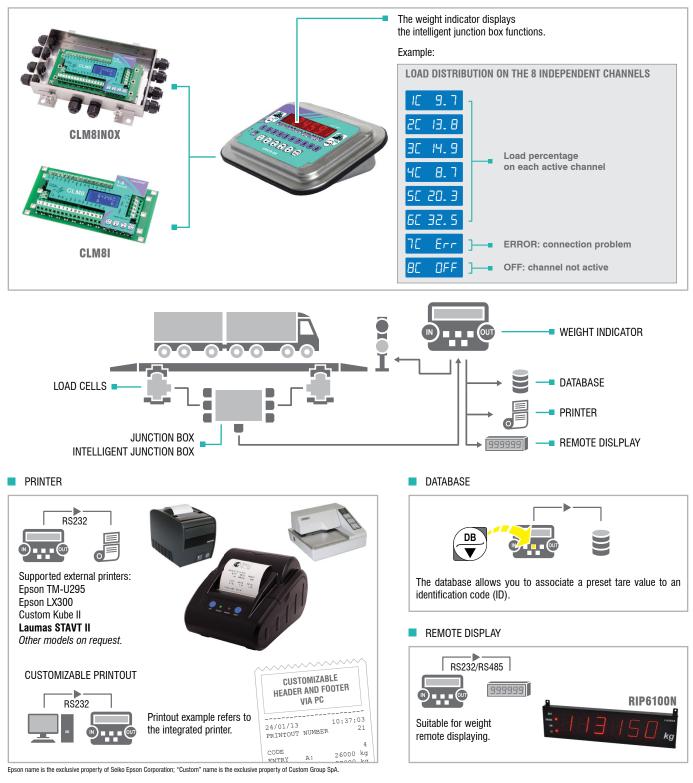
METROLOGICAL SPECIFICATIONS OF Type-approved instruments	OIML	NTEP
	EU: 2014/31/UE; OIML R76:2006; EN45501:2015 Russian Federation: GOST OIML R76-1-2011	
Applied standards by region	United Kingdom: Non-automatic Weighing Instrument Regulations 2016 Australia: National Measurement Regulations 1999	USA: NIST HANDBOOK 44, 2020; NCWM PUB 14, 2021
	New Zealand: Weights and Measures Regulations 1999 China: Law on Metrology of the People's Republic of China	
Operation modes	single interval, multi-interval, multiple range	single interval, multi-interval, multiple range
Accuracy class	lli or lili	III or IIIL
Maximum number of scale verification divisions	10000 (class III); 1000 (class IIII)	10000 (class III/IIIL)
Minimum input signal for scale verification division	0.2 µV/VSI	
Working temperature	-10 °C +40 °C	-10 °C +40 °C (+14 °F +104 °F)

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■ INTELLIGENT JUNCTION BOXES



**OPTIONS ON REQUEST** 

DESCRIPTION	CODE	
Alibi memory.	OPZWALIBI	
The Company reserves the right to make changes to the technical data, drawings and images without notice.		

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