

### 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](http://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.

### 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

-  OIML R76:2006, class III, 3x10000 divisions, 0.2  $\mu$ V/VSI
-  UL Recognized component - Complies with United States and Canada regulations
-  Complies with the Eurasian Customs Union regulations
-  Equivalent of the CE marking for the United Kingdom
-  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 -  $n_{max}$  10000 - Class III/IIIL - Complies with United States regulations for legal for trade use
-  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

### TECHNICAL FEATURES


Power supply and consumption	12÷24 VDC ±10%; 6 W
Number of load cells • Load cells supply	up to 8 (350 Ω) or 16 (700 Ω) - 4/6 wires • 5 VDC/120 mA
Linearity	<0.01% full scale
Thermal drift	<0.0005% 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 • 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
	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
Applied standards by region	EU: 2014/31/UE; OIML R76:2006; EN45501:2015 Russian Federation: GOST OIML R76-1-2011 United Kingdom: Non-automatic Weighing Instrument Regulations 2016 Australia: National Measurement Regulations 1999 New Zealand: Weights and Measures Regulations 1999 China: Law on Metrology of the People's Republic of China	USA: NIST HANDBOOK 44, 2020; NCWM PUB 14, 2021
Operation modes	single interval, multi-interval, multiple range	single interval, multi-interval, multiple range
Accuracy class	III or IIIL	III or IIIL
Maximum number of scale verification divisions	10000 (class III); 1000 (class IIIL)	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)

### INTELLIGENT JUNCTION BOXES



**CLM4ABS / CLM8ABS**

**CLM8INOX**



The weight indicator displays the intelligent junction box functions.

Example:

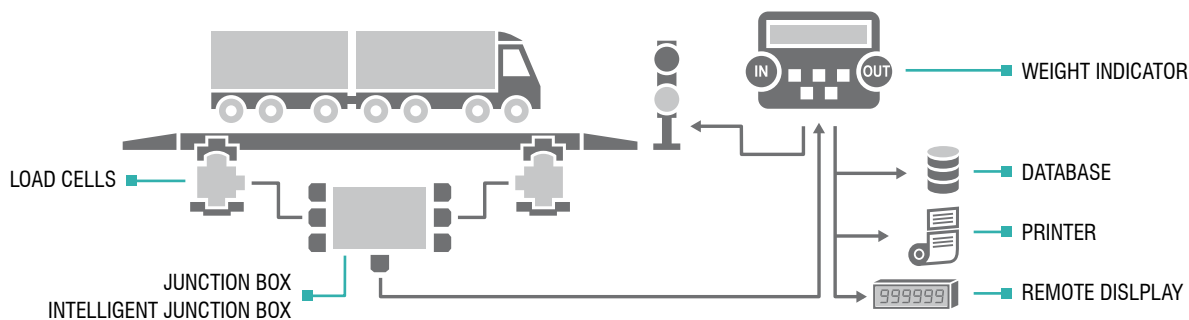
**LOAD DISTRIBUTION ON THE 8 INDEPENDENT CHANNELS**

1C	9.7
2C	13.8
3C	14.9
4C	8.7
5C	20.3
6C	32.5
7C	Err
8C	OFF

Load percentage on each active channel

ERROR: connection problem

OFF: channel not active



### PRINTER



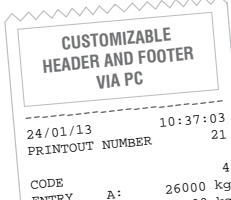
Supported external printers:  
Epson TM-U295  
Epson LX300  
Custom Kube II  
**Laumas STAVT II**  
*Other models on request.*



**CUSTOMIZABLE PRINTOUT**




Printout example refers to the integrated printer.



Epson name is the exclusive property of Seiko Epson Corporation; "Custom" name is the exclusive property of Custom Group SpA.

### DATABASE



The database allows you to associate a preset tare value to an identification code (ID).


### REMOTE DISPLAY



Suitable for weight remote displaying.



### OPTIONS ON REQUEST

DESCRIPTION	CODE
 <p>Alibi memory.</p>	OPZWALIBI

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