

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.
- Printing (header and footer) can be customized using the free "Instrument Manager" PC software, available at [www.laumas.com](http://www.laumas.com).
- 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
-  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  |                               |
| Display range  | ±999999  |                               |
| Decimals • Display increments                                    | 0÷4 • x1 x2 x5 x10 x20 x50 x100                                  |                               |
| Digital filter • Readings per second                             | 10 levels • 5÷300  |                               |
| 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                          | <p>EU: 2014/31/UE; OIML R76:2006; EN45501:2015</p> <p>Russian Federation: GOST OIML R76-1-2011</p> <p>United Kingdom: Non-automatic Weighing Instrument Regulations 2016</p> <p>Australia: National Measurement Regulations 1999</p> <p>New Zealand: Weights and Measures Regulations 1999</p> <p>China: Law on Metrology of the People's Republic of China</p> | <p>USA: NIST HANDBOOK 44, 2020; NCWM PUB 14, 2021</p> |
| 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

The weight indicator displays the intelligent junction box functions.

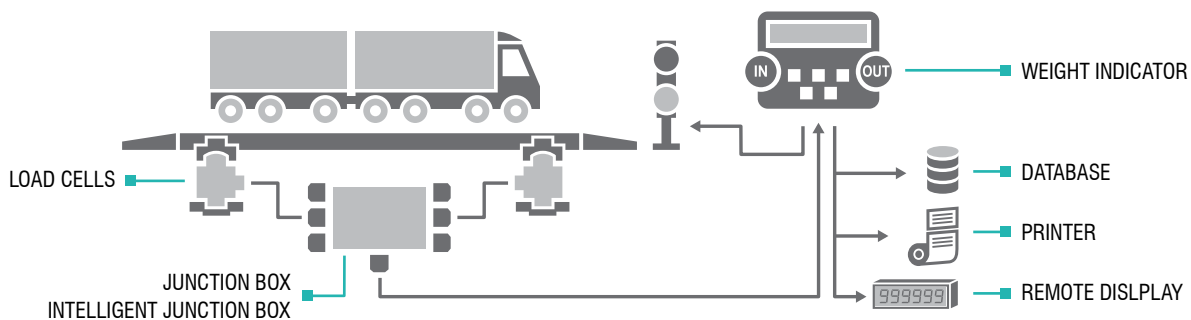
Example:

| 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

### DATABASE

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

### REMOTE DISPLAY

Suitable for weight remote displaying.

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

### OPTIONS ON REQUEST

| DESCRIPTION          |
|----------------------|
| <p>Alibi memory.</p> |

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