WTAB-BGE

GRAPHIC WEIGHBRIDGE INDICATOR

LAUMAS®

CE · UKCA · OIML · M · c UL us · EAC · NMI TRADE APPROVED · NEW ZEALAND TRADE APPROVED · UK TRADE APPROVED · NTEP · PA · RS485 RS232 · ALIBI

ETHERNET TCP/IP · Instrument Manager · BARCODE SCAN · RECHARGEABLE BATTERY

MULTILANGUAGE
SOFTWARE

Integrated thermal printer
(on request)

D-SUB connectors - IP40

DESCRIPTION

- ABS desk weight indicator.
- Dimensions: 315x170x315 mm.
- Backlit LCD graphic display, resolution: 240x64 pixel, visible area: 133x39 mm.
- 52-key keyboard.
- IP40 protection rating.
- Real-time clock/calendar with buffer battery.
- Power supply included.
- Multilanguage software (4 languages + 1 customizable).
- 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.

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

INPUTS/OUTPUTS AND COMMUNICATION

- 1 Ethernet TCP/IP port.
- 2 USB ports for connection to external keyboard, barcode reader or pendrive (included).
- 4 serial ports (2x RS485 and 2x RS232) for communication via protocols ModBus RTU, ASCII Laumas or continuous one way transmission.
- 5 relay outputs controlled by the setpoint values or via protocols.
- 3 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 Ω, (or 16 load cells, 700 Ω) in parallel by junction box;
  - digital load cells: allow the use of advanced functions as digital equalization, load distribution analysis and automatic diagnostics.
  - 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 500 vehicles (license plates, preset tares), products, customers and operators.
- Up to 10000 weighings that can be saved in alibi memory.
- Remote display with traffic light function managed via RS485/RS232.
- Traffic light management via relay outputs.
- Totals management (loaded and unloaded products).
- Barcode reader management with printing and open weighing ID recall.
- Data transfer to USB pendrive (included).
- 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.

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	OIML R76:2006, class III, 3x10000 divisions, 0.2 μV/VSI
cULus	UL Recognized component - Complies with United States and Canada standards
EAC	Complies with the Eurasian Customs Union standards
UKCA	Equivalent of the CE marking for the United Kingdom
NMI TRADE APPROVED	NMI Trade Approved - Complies with Australian market regulations for legal for trade use
NZ TRADE APPROVED	Complies with New Zealand regulations for legal for trade use
UK TRADE APPROVED	Complies with United Kingdom regulations for legal for trade use
NTEP	NTEP - n_{max} 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

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	5 - max 115 VAC/150 mA
Optoisolated digital inputs	3 - 5÷24 VDC PNP
Serial ports	2x RS485, 2x 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

c$\mathbf{UL}$us	Relay outputs	5 - 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 IIII	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

CLM4ABS / CLM8ABS

CLM8INOX

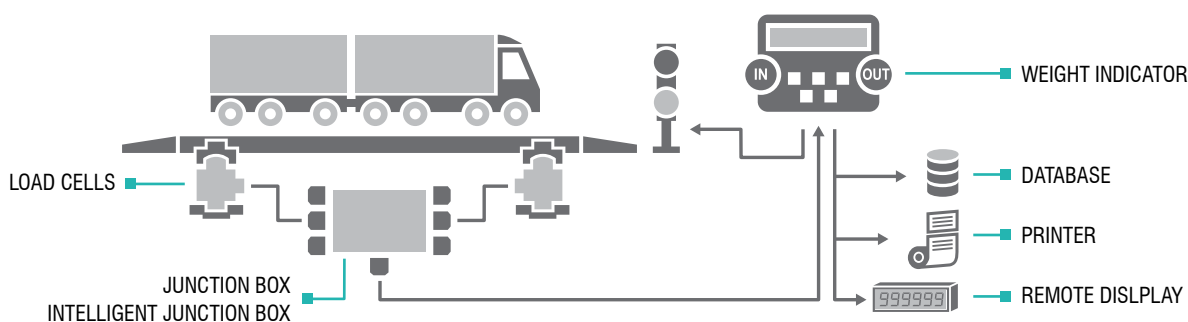The weight indicator displays
the intelligent junction box functions.
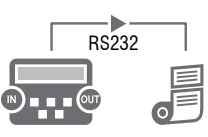
Example:

LOAD DISTRIBUTION

The instrument displays, in graphical form, the current load distribution on each active channel.

Channels

Gross weight — 2280

Load % on each active channel — 9.7 13.8 14.9 8.7 20.3 32.5 ERROR OFF

ERROR: connection problem

OFF: inactive channel

LOAD CELLS

JUNCTION BOX
INTELLIGENT JUNCTION BOX

WEIGHT INDICATOR
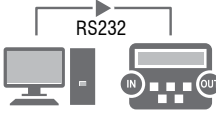
DATABASE

PRINTER

REMOTE DISLPLAY

■ PRINTER

RS232

Supported external printers:
Epson TM-U295
Epson LX300
Custom Kube II
Epson TM-T20III
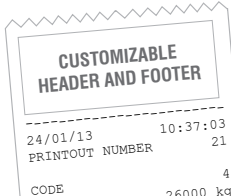**Laumas STAVT II**
Other models on request.

Integrated thermal printer

CUSTOMIZABLE PRINTOUT

RS232

Printout example refers to the integrated printer.

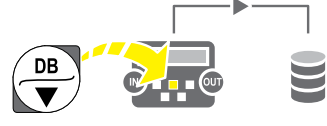CUSTOMIZABLE
HEADER AND FOOTER

24/01/13   10:37:03
PRINTOUT NUMBER   21
                        4
CODE   26000 kg

■ DATABASE

DB

The database allows to associate a vehicle (license plate and preset tare) to a customer identification code (ID) and to weighing data.

■ REMOTE DISPLAY

RS232/RS485

RIP6100IP65

Remote display with traffic light function managed via serial port.

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

WTAB-BGE

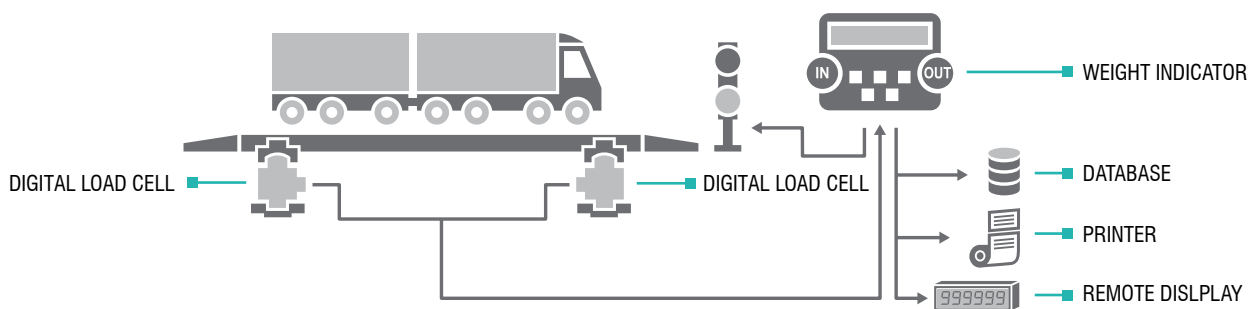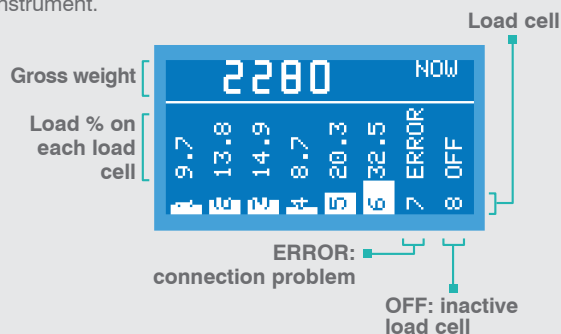## GRAPHIC WEIGHBRIDGE INDICATOR

LAUMAS®

■ DIGITAL LOAD CELLS

The weight indicator displays
the intelligent junction box functions.

COD

Example:

LOAD DISTRIBUTION

The instrument displays, in graphical form, the current load distribution on each digital load cell connected to the instrument.

Load cell

Gross weight

Load % on each load cell

ERROR: connection problem

OFF: inactive load cell

DIGITAL LOAD CELL — DIGITAL LOAD CELL — WEIGHT INDICATOR — DATABASE — PRINTER — REMOTE DISLPLAY

OPTIONS ON REQUEST

	DESCRIPTION	CODE
	Integrated thermal printer: 24 column, paper end sensor, working temperature: 0÷50 °C, humidity: 20%÷80%, paper roll included (width: 57 ±0.5 mm - outside diameter: 50 mm). ➡ *One RS485 port not available.*	OPZWTABSTA
	Thermal paper roll.	CARTASTAVP
	Adhesive thermal paper roll.	CARTAFISCADEN
	Alibi memory.	OPZWALIBI
	12.2 V rechargeable lead battery, 2.8 Ah capacity, supplied already installed in the instrument. Operating time: 6 hours.	OPZWBATTWTAB

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