



MODBUS RTU

DESCRIPTION

- WiFi weight transmitter in IP65 polycarbonate box with 3 PG9 cable glands (on request IP67 version).
- Dimensions: 170x80x65 mm (four fixing holes Ø4 mm; centre distance 120x60 mm).
- Backlit alphanumeric LCD display, 38x16 mm visible area, two-line by eight-digit (5 mm height).
- Six indicator LED.
- Four-key membrane keyboard for calibration and system configuration.

INPUT/OUTPUT AND FIELDBUSES

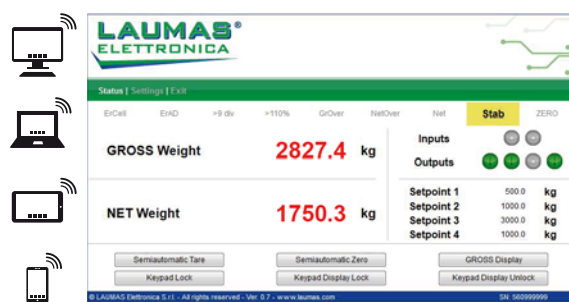
- WiFi module for wireless connection via integrated web server (to display the status and to manage the host instrument parameters) or via ModBus RTU, ASCII Laumas protocols.
- RS485/RS232 serial ports for communication via ModBus RTU protocol, ASCII Laumas bidirectional or continuous one way transmission.
- 4 relay digital outputs controlled by the setpoint values or via protocols or web.
- 2 PNP digital inputs: status reading via serial communication protocols or web.
- 1 load cell input.

MAIN FUNCTIONS

- Connections to:
 - PC via WiFi/virtual Ethernet port
 - PC/PLC via RS485/RS232 (up to 99 instruments with line repeaters, up to 32 without line repeaters).
 - others TLKWF devices and W series Laumas instruments with OPZW1RADIO optional module via WiFi.
 - PC / smartphone / tablet via web browser (point-to-point direct connection).
 - max. 8 load cells in parallel.
- Communication via existing WiFi networks.
- Digital filter to reduce the effects of weight oscillation.
- Theoretical calibration (via keyboard) and real (with sample weights and the possibility of weight linearization up to 5 points).
- Tare weight zero setting.
- Automatic zero setting at power-on.
- Gross weight zero tracking.
- Semi-automatic tare (net/gross weight) and predetermined tare.
- Semi-automatic zero.
- Displaying the maximum weight value reached (peak).
- Setting of setpoint values and hysteresis.
- Energy saving mode.



WIFI WEB SERVER & SITE Integrated web site in combination with WiFi connection for supervision, management and remote control of the weight transmitter. The web site is displayed on PC, smartphone and tablet with standard browsers (Explorer, Safari, Chrome, etc).



CERTIFICATIONS



OIML R76:2006, III class, 3x10000 divisions 0.6 µV/VS1

CERTIFICATIONS ON REQUEST



Initial verification (Legal Metrology)



Complies with the Eurasian Custom Union standards (Russia, Belarus, Kazakhstan)

TECHNICAL FEATURES

Power supply and consumption	12÷24 VDC ±10%; 2 W
Number of load cells • Load cells supply	up to 8 (350 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) - 4.8kHz
Divisions (with measure range ±10 mV and sensitivity 2 mV/V)	±999999 • 0,01 µV/d
Measure range	±39 mV
Load cell's sensitivity	±7 mV/V
Conversion per second	300/s
Display range	±999999
Decimals • Display increments	0÷4 • x1 x2 x5 x10 x20 x50 x100
Digital filter • Conversion rate	0.012÷7 s • 5÷300 Hz
Relay logic outputs	n. 4 - 115 VAC/0.5 A
Optoisolated logic inputs	n. 2 - 5÷24 VDC PNP
Serial ports	RS485, RS232
Baud rate	2400, 4800, 9600, 19200, 38400, 115200 (bit/s)
Wireless	WiFi module with serial tunneling protocols and integrated web server. Radio range up to 100 m in free air.
Humidity (condensate free)	85%
Storage temperature	-30°C +80°C
Working temperature	-20°C +60°C

METROLOGICAL SPECIFICATIONS OF TYPE-APPROVED INSTRUMENTS

Applied standards	2014/31/UE - EN45501:2015 - OIML R76:2006
Accuracy class	III or IIII
Maximum number of scale verification divisions	10000 (class IIII); 1000 (class IIII)
Minimum input signal for scale verification division	0.6 µV/VSI
Working temperature	-10°C +40°C

OPTIONS ON REQUEST

DESCRIPTION	CODE
 IP67 polycarbonate waterproof box 170x80x65 mm (4 fixing holes Ø4 mm; centre distance 120x60 mm) 2 PG9 cable glands - Extractable power connector → <i>instrument not included</i>	OPZWFIP67
 Rechargeable external lead battery 12 V - 2200 mAh capacity - IP67 polycarbonate waterproof box 160x80x85 mm with transparent cover (4 fixing holes Ø4 mm; centre distance 120x60 mm) - Battery charger. 26 hours operating time*	BATEXT
 Rechargeable internal NiMH battery 8 elements - 1.2 V - AA type - 2450 mAh capacity - Supplied already installed in the instrument with external dedicated switch: 190x80x65 mm overall dimensions box 24 hours operating time*	OPZBATTWF

* Approx. maximum operating time for typical use with fully charged battery with 4 load cells (350 ohm) and enabled energy saving mode.

The Company reserves the right to make changes to the technical data, drawings and images without notice.