



**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, two-line by 8-digit (5 mm height), visible area: 38x16 mm.
- 6 signalling LED.
- 4-key membrane keyboard.

### INPUTS/OUTPUTS AND COMMUNICATION

- WiFi module for wireless connection via integrated web server (for remote supervision, management and control of the instrument) or via ModBus RTU, ASCII Laumas protocols.
- RS485/RS232 serial ports for communication via protocols ModBus RTU, ASCII Laumas bidirectional or continuous one way transmission.
- 4 relay 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 dedicated input.

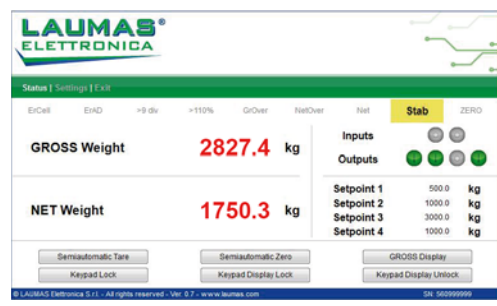
### MAIN FUNCTIONS

- 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 Laumas W series instruments (equipped with OPZW1RADIO optional module) via WiFi;
  - PC/smartphone/tablet via web browser (point-to-point direct connection);
  - up to 8 load cells in parallel by junction box;
  - W series instruments via RS485.
- Communication with existing WiFi networks.
- 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 5 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.
- Displaying of the maximum weight value reached (peak).
- Hysteresis and setpoint value setting.
- Energy saving mode.
- All functions can be managed by a W series instrument connected via RS485 serial port or WiFi (excluding instruments with graphic display).



#### WIFI WEB SERVER & SITE

Integrated website in combination with the WiFi connection for remote supervision, management and control of the weight transmitter. The website can be viewed on PC, smartphone and tablet using standard browsers.



### CERTIFICATIONS



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

CERTIFICATIONS ON REQUEST



Initial verification in combination with Laumas weighing module



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) - 4.8 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	RS485, RS232
Baud rate	2400, 4800, 9600, 19200, 38400, 115200 (bit/s)
Wireless	WiFi module with serial protocols in tunnel mode and integrated web server. Radio range up to 100 m line of sight.
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
Operation modes	single interval, multi-interval, multiple range
Accuracy class	III or IIII
Maximum number of scale verification divisions	10000 (class III); 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
	<p><b>IP67 polycarbonate waterproof box</b> 170x80x65 mm (4 fixing holes Ø4 mm; centre distance: 120x60 mm).</p> <ul style="list-style-type: none"> <li>2 PG9 cable glands.</li> <li>Extractable power connector.</li> </ul> <p>→ <i>instrument not included.</i></p>	OPZWFIP67
	<p><b>Rechargeable external lead battery.</b></p> <ul style="list-style-type: none"> <li>12 V - 2200 mAh capacity</li> <li>IP67 polycarbonate waterproof box 160x80x85 mm with transparent cover (4 fixing holes Ø4 mm; centre distance: 152x122 mm).</li> <li>Battery charger.</li> <li>26 hours operating time*.</li> </ul>	BATEXT
	<p><b>Rechargeable internal NiMH battery.</b></p> <ul style="list-style-type: none"> <li>8 elements - 1.2 V - AA type - 2450 mAh capacity.</li> <li>Supplied already installed in the instrument, with external dedicated switch: 190x80x65 mm overall box dimensions.</li> <li>24 hours operating time*.</li> </ul>	OPZBATTWF

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

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