W200

WEIGHT INDICATOR WITH FORMULA MANAGEMENT











ANALOG OUTPUT

#### **AVAILABLE VERSIONS:**

- W200 BASE
- W200 LOAD
- W200 UNLOAD
- W200 3 PRODUCTS
- W200 6 PRODUCTS
- W200 14 PRODUCTS



PROGRAM	OIML	M	NMI HEADT	EAC	c <b>FL</b> us	CODE
W200 BASE	R76 - R61	•	•	•	•	W200
W200 LOAD	R76 - R61	٠	•	•	•	W200-C 99form/1pr LOAD
W200 UNLOAD	R76 - R61	•	•	•	•	W200-S 99form/1pr UNLOAD
W200 3 PRODUCTS	R76 - R61	•	•	٠	•	W200-3 99form/3pr LOAD
* W200 6 PRODUCTS	R76 - R61	•	•	٠	•	W200-6 99form/6pr LOAD
* W200 14 PRODUCTS	R76 - R61	•	•	٠	•	W200-14 99form/14pr LOAD

★ External 8-relay modules included

ON REQUEST

## CERTIFICATIONS

OIML	OIML R76:2006, class III, 3x10000 divisions, 0.2 $\mu$ V/VSI / OIML R61 - WELMEC Guide 8.8:2011 (MID)			
	CERTIFICATIONS ON REQUEST			
М	Initial verification in combination with Laumas weighing module			
c <b>W</b> us	UL Recognized component - Complies with the United States and Canada standards			
EAC	Complies with the Eurasian Custom Union standards (Russia, Belarus, Kazakhstan)			
	NMI Trade Approved - Complies with the Australian standards for legal use with third parties			

# FIELDBUSES

# MODBUS RTU



### DESCRIPTION

- Weight indicator in DIN box suitable for front panel mounting (dimensions: 96x96x130 mm; drilling template: 92x92 mm).
- 6-digit red LED semi-alphanumeric display (14 mm height), 7-segment.
- 8 signalling LED.
- 5-key membrane keyboard.
- IP54 front panel protection rating (IP65 front optional).
- Real-time clock/calendar with buffer battery.
- Extractable screw terminal blocks.

## MAIN FUNCTIONS

- Connections to:
  - PLC via analog output (on request);
  - 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 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.
- 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).
- Direct connection between RS485 and RS232 without converter.
- Weight value printing with date and time via keyboard or external contact.

### **INPUTS/OUTPUTS AND COMMUNICATION**

- RS485/RS232 serial ports for communication via ModBus RTU protocol, ASCII bidirectional or continuous one way transmission.
- 5 relay outputs controlled by the setpoint values or via protocols (4 outputs if analog output is present).
- 3 optoisolated PNP digital inputs: status reading via serial communication protocols (2 inputs if analog output is present).
- 1 load cell dedicated input.
- Current or voltage 16 bit optoisolated analog output (option on request).

#### **BASE PROGRAM**

- Hysteresis and setpoint value setting.
- The indicator can be used as a remote display with setpoints.
- 12 groups selection by 5 setpoint via external selector switch or contact (option on request).

#### **BATCHING PROGRAM**

- 99 settable formulas.
- Batching resume after a blackout.
- Automatic fall calculation.
- Tolerance error control.
- Precision batching through slow function.
- Precision batching through tapping function.
- Consumption storage.
- Printing of batching data.
- Alarm contact management.
- Selection of the first 12 formulas via external selector switch or contact (option on request).
- Batching start via external contact or keyboard.

## **TECHNICAL FEATURES**

Power supply and consumption	12÷24 VDC ±10%; 5 W (on request: 115÷230 VAC; 50÷60 Hz; 6 VA)			
Number of load cells • Load cells supply	up to 8 (350 Ω) - 4/6 wires • 5 VDC/240 mA			
Linearity • Analog output linearity	<0.01% full scale • <0.01% full scale			
Thermal drift • Analog output thermal drift	<0.0005% full scale/°C • <0.003% full scale/°C			
A/D Converter	24 bit (16000000 points) - 4.8 kHz			
Divisions (with measurement range $\pm 10$ 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	5/4 - max 115 VAC/150 mA			
Optoisolated digital inputs	3/2 - 5÷24 VDC PNP			
Serial ports	RS485, RS232			
Baud rate	2400, 4800, 9600, 19200, 38400, 115200 (bit/s)			
Optoisolated analog output (option on request)	16 bit = 65535 divisions. 0÷20 mA; 4÷20 mA (up to 300 Ω) 0÷10 V; 0÷5 V; ±10 V; ±5 V (min 10 kΩ)			
Humidity (condensate free)	85%			
Storage temperature	-30 °C +80 °C			
Working temperature	-20 °C +60 °C			