

## MODBUS RTU



## PROGRAM

<b>4 PRODUCTS</b>	50 formulas / 20 steps	WR4/50/1
<b>* 12 PRODUCTS</b>	50 formulas / 20 steps	WR12/50/1
<b>* 8 PRODUCTS + 4 LITRE-COUNTER</b>	50 formulas / 20 steps	WR8+4/50/1
<b>* 20 PRODUCTS</b>	50 formulas / 20 steps	WR20/50/1

★ External 8-relay module included.

## CODE

## DESCRIPTION

- Weight indicator in DIN box suitable for front panel mounting.
- Dimensions: 192x96x150 mm (drilling template: 186x92 mm).
- 6-digit semi-alphanumeric red LED display (14 mm height).
- Backlit LCD display, two-line by 16-digit (5 mm height).
- 4 signalling LED.
- 18-key keyboard.
- IP54 front panel protection rating.
- Real-time clock/calendar.
- External 8-relay module included in the versions with more than 4 products: suitable for mounting on Omega/DIN rail, to install up to 100 meters of distance; dimensions: 93x60x126 mm; power supply: 24 VDC 8 W; external contacts: 115 VAC 0.5 A.

## INPUTS/OUTPUTS AND COMMUNICATION

- 2 independent serial ports: COM1=RS232 and COM2=RS232 or RS422/485 for communication via ModBus RTU protocol, Profibus DP (RS422/485), ASCII Laumas bidirectional or continuous one way transmission.
- 8 relay outputs controlled by the setpoint values or via protocols.
- 8 optoisolated PNP digital inputs: status reading via serial communication protocols.

## MAIN FUNCTIONS

- Connections to:
  - PC/PLC via COM2 (up to 32 instruments) with PC Supervision Software;
  - remote display and printer via COM1/2;
  - up to 8 load cells in parallel by junction box.
- 50 formulas to 20 programming steps (otherwise 99 formulas to 10 programming steps, on request).
- Programming, in the desired order by the operator, steps for loading product, partial or total unloading, opening and closing relay output, waiting for external input, waiting for a desired time.
- For litre-counter version: setting and displaying products directly in kg.
- Batching start via keyboard by setting formula and desired cycles (up to 9999).
- Starting via external contact of the formula and the number of cycles previously stored by keyboard, or starting via external contact of the first 15 formulas (9 formulas by contraves) selected by the four BCD inputs for a only cycle at a time.
- Alarm for lack of product during the batching.
- Automatic fall calculation.
- Tolerance error control.
- Precision batching through slow function.
- Precision batching through tapping function.
- Minimum stocks check for each product.
- Reading real stock: consumption and stocks calculation for each product (option on request).
- Production calculation for each formula with cycle's number executed.
- Alarm contact management.
- Automatic batching via keyboard for a single product.
- Automatic unloading via keyboard for a preset amount.
- Assisted manual batching.
- Print of batching data.
- Pause of the batching by the keyboard.
- Batching resume after a blackout.
- Digital filter to reduce the effects of weight oscillation.
- Theoretical calibration and real calibration (with sample weights).
- Tare weight zero setting.
- Reading the load cells value expressed in mV.
- Password to protect the access to selected functions.
- Autotare at batching start.

## CERTIFICATIONS

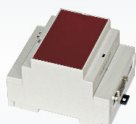



Equivalent of the CE marking for the United Kingdom

## TECHNICAL FEATURES

Power supply and consumption	230 VAC; 50/60 Hz; 25 VA
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	<0.0003% full scale/°C
A/D Converter	24 bit
Internal divisions	60000 (20% ÷ 100% full scale)
Measurement range	-7.5 mV +17.5 mV
Display range	-99999; +900000
Decimals • Display increments	0-4 • x1 x2 x5 x10 x20 x50 x100
Digital filter • Readings per second	0.2-25 Hz • 6, 12, 25, 50 reading/s
Relay outputs	n. 8 - 115 VAC/30 VDC 0.5 A
Optoisolated digital inputs	n. 8 - 12/24 VDC PNP
Serial ports	COM1: RS232; COM2: RS232, RS422/RS485
Baud rate	2400, 9600, 19200, 38400 (bit/s)
Humidity (condensate free)	85%
Storage temperature	-20°C +70°C
Working temperature	-10°C +50°C

## OPTIONS ON REQUEST

DESCRIZIONE	CODE
 <p>Profibus converter, IP40, suitable for Omega/DIN rail mounting, allows to connect 1 or 2 Laumas instruments in Slave configuration to any security Profibus DP Master by means of the RS422/485 port. Dimensions: 71x58x90 mm.</p> <p>1 instrument 2 instruments</p>	<p>MPROFIUNO MPROFIDUE</p>
 <p>Reading real stock: consumption and stocks calculation for each product. By weighing the silos by means weight transmitters and load cells, it is possible transmit to WR the real quantity (stock) present into the silos.</p>	