W100
WEIGHT INDICATOR FOR LOCAL PANEL

DESCRIPTION
- Weight indicator in DIN box suitable for front panel mounting (dimensions: 48x96x130 mm; drilling template: 45x92 mm).
- 6-digit red LED semi-alphanumeric display (14 mm height), 7-segment.
- 8 signalling LED.
- 4-key membrane keyboard.
- IP64 front panel protection rating (IP65 front optional).
- Real-time clock/calendar with buffer battery.
- Extractable screw terminal blocks.

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).
- 12 groups selection by 5 setpoint via external selector switch or contact (option on request).

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.
- Hysteresis and setpoint value setting.
- Weight value printing with date and time via keyboard or external contact.
- The indicator can be used as a remote display with setpoint.

AVAILABLE VERSIONS:
- W100
- W100/AN

ANSI OUTPUT OPTION
- 12 groups selection by 5 setpoint via external selector switch or contact (option on request).

REV 02 del 06/05/2016
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CERTIFICATIONS

- OIML R76:2006, class III, 3x10000 divisions, 0.2 µV/VSI
- OIML R61 - WELMEC Guide 8.8:2011 (MID)

OPTIONS ON REQUEST

- Optoisolated 16 bit analog output.
  ➞ One input and one output not available.

TECHNICAL FEATURES

- Power supply and consumption: 12÷24 VDC ±10%; 5 W
- Number of load cells: 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: ±999999 ±0.01 µV/d
- Measurement range: ±39 mV
- Conversions per second: 300/s
- Display range: ±999999
- Decimals: 0÷±4 • x1 x2 x5 x10 x20 x50 x100
- Digital filter: 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: 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
- Relay outputs: 5/4 - max 30 VAC, 80 VDC/150 mA
- Working temperature: -20 °C +50 °C
- Power supply device marked “LPS” (limited power source) or “Class 2”

METROLOGICAL SPECIFICATIONS OF TYPE-APPROVED INSTRUMENTS

- 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: 0.2 µV/VSI
- Working temperature: -10 °C +40 °C