

W100

WEIGHT INDICATOR FOR LOCAL PANEL



MODBUS RTU



AVAILABLE VERSIONS:

- W100
- W100/AN

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.
- IP54 front panel protection rating (IP65 front optional).
- Real-time clock/calendar with buffer battery.
- Extractable screw terminal blocks.

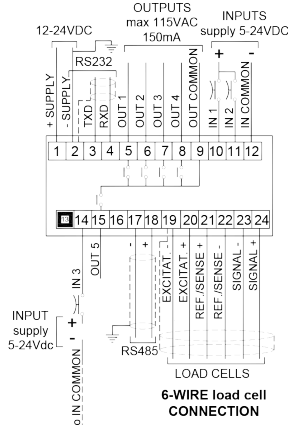
INPUTS/OUTPUTS AND COMMUNICATION

- 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).

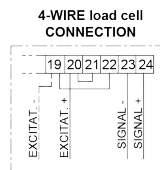
MAIN FUNCTIONS

- 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 ANALOG OUTPUT OPTION remote display with setpoint.

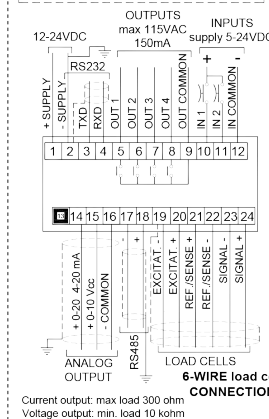
5 USCITE / 5 OUTPUTS
CINQUE SETPOINTS IMPOSTABILI O GESTIONE DELLE USCITE DA REMOTO VIA PROTOCOLLO. THE OUTPUTS CAN WORK AS 5 SET POINTS OR CAN BE REMOTELY SWITCHED VIA PROTOCOL.



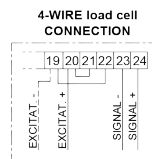
3 INGRESSI / 3 INPUTS
IMPOSTABILI CON FUNZIONE DI: NETTO/LORDO - AZZERAMENTO - PICCO - STAMPA oppure GESTIONE DA REMOTO. THE INPUTS CAN BE REMOTELY SWITCHED VIA PROTOCOL OR WORK AS: NET/GROSS WEIGHT - ZERO-SETTING - PEAK - PRINT



4 USCITE / 4 OUTPUTS
QUATTRO SETPOINTS IMPOSTABILI O GESTIONE DELLE USCITE DA REMOTO VIA PROTOCOLLO. THE OUTPUTS CAN WORK AS 4 SET POINTS OR CAN BE REMOTELY SWITCHED VIA PROTOCOL.



2 INGRESSI / 2 INPUTS
IMPOSTABILI CON FUNZIONE DI: NETTO/LORDO - AZZERAMENTO - PICCO - STAMPA oppure GESTIONE DA REMOTO. THE INPUTS CAN BE REMOTELY SWITCHED VIA PROTOCOL OR WORK AS: NET/GROSS WEIGHT - ZERO-SETTING - PEAK - PRINT



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CERTIFICATIONS



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

CERTIFICATIONS ON REQUEST

M	Initial verification in combination with Laumas weighing module Support for metric label (dimensions: 124x77x1.5 mm)	
UL US	UL Recognized component - Complies with the United States and Canada standards	<i>Richiedere offerta</i>
ERC	Complies with the Eurasian Custom Union standards (Russia, Belarus, Kazakhstan)	<i>Richiedere offerta</i>
NMI	NMI Trade Approved - Complies with the Australian standards for legal use with third parties	<i>Richiedere offerta</i>

OPTIONS ON REQUEST



Optoisolated 16 bit **analog output**.
 → One input and one output not available.

TECHNICAL FEATURES

Power supply and consumption	12÷24 VDC \pm 10%; 5 W	
Number of load cells • Load cells supply	up to 8 (350 Ω) - 4/6 wires • 5 VDC/120 mA	
Linearity • Analog output linearity	<0.01% full scale • <0.01% full scale	
Thermal drift • Analog output thermal drift	<0.0005% full scale/ $^{\circ}$ C • <0.003% full scale/ $^{\circ}$ C	
A/D Converter	24 bit (16000000 points) - 4.8 kHz	
Divisions (with measurement range \pm 10 mV and sensitivity 2 mV/V)	\pm 999999 • 0,01 μ V/d	
Measurement range	\pm 39 mV	
Usable load cells sensitivity	\pm 7 mV/V	
Conversions per second	300/s	
Display range	\pm 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; \pm 10 V; \pm 5 V (min 10 k Ω)	
Humidity (condensate free)	85%	
Storage temperature	-30 $^{\circ}$ C +80 $^{\circ}$ C	
Working temperature	-20 $^{\circ}$ C +60 $^{\circ}$ C	
UL US	Relay outputs	5/4 - max 30 VAC, 60 VDC/150 mA
	Working temperature	-20 $^{\circ}$ C +50 $^{\circ}$ C
	Power supply device marked "LPS" (limited power source) or "Class 2"	

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 IIII); 1000 (class IIII)
Minimum input signal for scale verification division	0.2 μ V/VSI
Working temperature	-10 $^{\circ}$ C +40 $^{\circ}$ C

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