

ADPEW200

W200 SERIES WEIGHT INDICATOR IN EXPLOSION PROOF BOX

LAUMAS®



DESCRIPTION

The system is composed by:

- W200 weight indicator.
- ATEX certified Zener barriers** (dimensions: 105x12.6x82 mm, standard OMEGA/DIN rail mounting):
MTL 7766Pac supply barrier
MTL 7761ac signal barrier
- ADPE explosion proof box (ATEX/IECEX) equipped with heat-resistant transparent tempered glass window and 5 external buttons which performs the same function as W200 keypad:

ATEX marking	IECEX marking
II 2(1) GD Ex d [ia Ga] IIB+H2 T6 Gb Ex tb [ia Da] IIIC T85°C Db IP66 (-20 °C ≤ Ta ≤ +40 °C) INERIS 14ATEX0008X	Ex d [ia Ga] IIB+H2 T6 Gb Ex tb [ia Da] IIIC T85°C Db IP66 (-20 °C ≤ Ta ≤ +40 °C) IECEX INE 13.0065X

- The instrument can be configured and managed using the free "Instrument Manager" PC software, which you can download from www.laumas.com.



PROGRAM

CODE

BASE	ADPEW200-B
LOAD	ADPEW200-C
UNLOAD	ADPEW200-S
3 PRODUCTS	ADPEW200-3
* 6 PRODUCTS	ADPEW200-6
* 14 PRODUCTS	ADPEW200-14
Multiprogram	ADPEW200-MU

★ External 8-relay modules included

FIELDBUSES



CERTIFICATIONS



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



UL Recognized component - Complies with the United States and Canada standards



Complies with the Eurasian Custom Union standards



NMI Trade Approved - Complies with Australian market regulations for legal for trade use



Complies with New Zealand regulations for legal for trade use



Complies with the United Kingdom regulations for legal for trade use

CERTIFICATIONS ON REQUEST



Conformity assessment (initial verification) in combination with Laumas weighing module

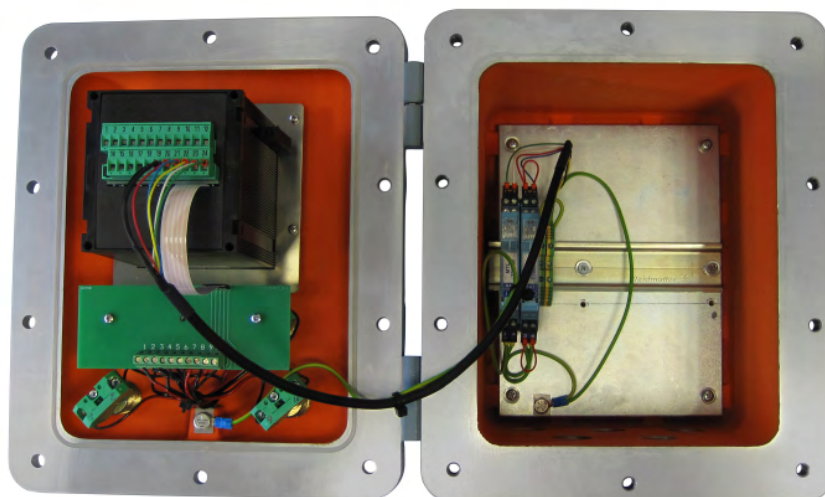
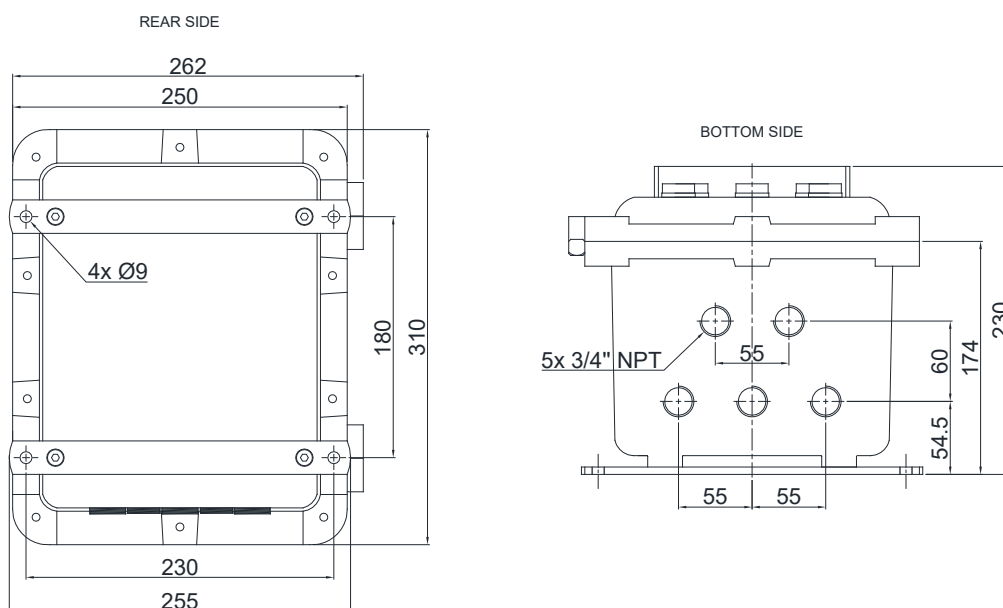


Complies with the Eurasian Custom Union standards for use in potentially explosive atmospheres



Complies with the regulations of the Russian Federation for legal for trade use

DIMENSIONS (mm)



Weight: 14 kg

TECHNICAL FEATURES

Power supply and consumption	12~24 VDC $\pm 10\%$; 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/120 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 ± 10 mV and sensitivity 2 mV/V)	± 999999 • 0.01 μ V/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 k Ω)
Humidity (condensate free)	85%
Storage temperature	-30 °C +80 °C
Working temperature	-20 °C +60 °C

	Relay outputs	5/4 - max 30 VAC, 60 VDC/150 mA
	Working temperature	-20 °C +50 °C
	Equipment to be powered by	12-24 VDC LPS or Class 2 power source

METROLOGICAL SPECIFICATIONS OF TYPE-APPROVED INSTRUMENTS

OIML

Applied standards by region	EU: 2014/31/UE; OIML R76:2006; EN45501:2015
	Russian Federation: GOST OIML R76-1-2011
	United Kingdom: Non-automatic Weighing Instrument Regulations 2016
	Australia: National Measurement Regulations 1999
	New Zealand: Weights and Measures Regulations 1999
Operation mode	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/VS1
Working temperature	-10 °C +40 °C

OPTIONS ON REQUEST AND COMPATIBILITY WITH BATCHING PROGRAMS - The options refer to the W200 weight indicator

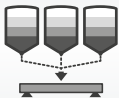
POWER SUPPLY		CODE
 115/230 VAC	Power supply 115/230 VAC; 50/60 Hz; 6 VA.	B C S 3P 6P 14P
	➔ Not compatible with fieldbuses. ➔ Not compatible with EAC certifications.	• • • • • •
INTERFACES AND FIELDBUSES		
 ANALOG OUTPUT	Optoisolated analog output - 16 bit.	* OPZW1ANALOGICA
	➔ One input and one output not available.	B C S 3P 6P 14P • • • • • •
 RS485+	Additional RS485 port.	* OPZW1RS485
	➔ One input and one output not available.	B C S 3P 6P 14P • • • • • •
 CANopen	CANopen protocol.	* OPZW1CAW200
	➔ Not compatible with 115 VAC and 230 VAC.	B C S 3P 6P 14P • - - - - -
 DeviceNet	DeviceNet protocol.	* OPZW1DEW200
	➔ Not compatible with 115 VAC and 230 VAC.	B C S 3P 6P 14P • - - - - -
 PROFIBUS	Profibus DP protocol.	* OPZW1PRW200
	➔ Not compatible with 115 VAC and 230 VAC.	B C S 3P 6P 14P • • • • • •
 Ethernet/IP	Ethernet/IP protocol - Ethernet port.	* OPZW1ETIP
	➔ Not compatible with 115 VAC and 230 VAC.	B C S 3P 6P 14P • - - - - -
 ETHERNET TCP/IP	Ethernet TCP/IP protocol - Ethernet port.	* OPZW1ETTCP
	Integrated software for remote supervision, management and control of the instrument.	B C S 3P 6P 14P • • • • • •
 MODBUS/TCP	Modbus/TCP protocol - Ethernet port.	* OPZW1MBTCP
	➔ Not compatible with 115 VAC and 230 VAC.	B C S 3P 6P 14P • • • • • •
 PROFINET	Profinet IO protocol - Ethernet port.	* OPZW1PNETIO
	➔ Not compatible with 115 VAC and 230 VAC.	B C S 3P 6P 14P • - - - - -

* Select one option among those marked with an asterisk.

OPTIONS ON REQUEST AND COMPATIBILITY WITH BATCHING PROGRAMS - The options refer to the W200 weight indicator

EXPANSIONS		CODE
	External 5-relay module to increase the capacity of SPDT contacts to 115 VAC/2 A.	RELE5M B C S 3P 6P 14P • • • • - -
	External 8-relay module to manage from 1 to 6 products; 8 relays up to max 115 VAC/2 A. Module included with models 6/14 PRODUCTS.	12 ÷ 24 VDC RELE6PROD24V 115/230 VAC RELE6PROD230V B C S 3P 6P 14P - - - - • •
	External 8-relay module to manage from 7 to 14 products to be added to RELE6PROD module; 8 relays up to max 115 VAC/2 A. Module included with model 14 PRODUCTS.	RELE14PROD B C S 3P 6P 14P - - - - - •

APPLICATIONS - SOFTWARE

	Formulas setting in percentage.	OPZWFORPERC B C S 3P 6P 14P - - - • • •
	Setting a quantity to be batched greater than the scale capacity with automatic calculation of cycles. ➔ Not available for CE-M approved version.	OPZWQMC B C S 3P 6P 14P - • - • • •
	Intermediate unloadings during the batching. ➔ Not available for CE-M approved version.	OPZWSCARI B C S 3P 6P 14P - - - • • •
	Partial unloadings at cycle end. ➔ Not available for CE-M approved version.	OPZWSCARP B C S 3P 6P 14P - - - • • •
	Alibi memory.	OPZWALIBI B C S 3P 6P 14P • • • • • •
	Data transfer from the instrument to the PC, via RS232 (directly) or RS485 (by converter) serial port. These data (weighed values, batchings, alarms) can be imported and processed on the PC using the PROG-DB software included. We suggest to use this option when the indicator is always connected to the PC.	OPZWDATIPC B C S 3P 6P 14P • • • • • •
	Manual batching with remote displays connected in parallel to the instrument via RS485 serial port; allows to display on different remote displays the following batching information: formula and product number, remaining quantity to be batched, gross weight.	OPZWLAUMAN B C S 3P 6P 14P - • • • • •

TREATMENT

	Treatment for metallic surfaces by "off-shore" painting for ADPEW200 box.	OPZOSADPEW200
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