

ADPEW200

W200 SERIES WEIGHT INDICATOR IN EXPLOSION PROOF BOX

LAUMAS®



DESCRIPTION

The system is composed by:

- W200 weight indicator (see W200 data sheet).
- 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
Ex 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

MODBUS RTU
MODBUS/TCP

CANopen

PROFIBUS







DeviceNet

EtherNet/IP





ETHERNET
TCP/IP

PI CERTIFIED
PROFIRUS • PROFINET

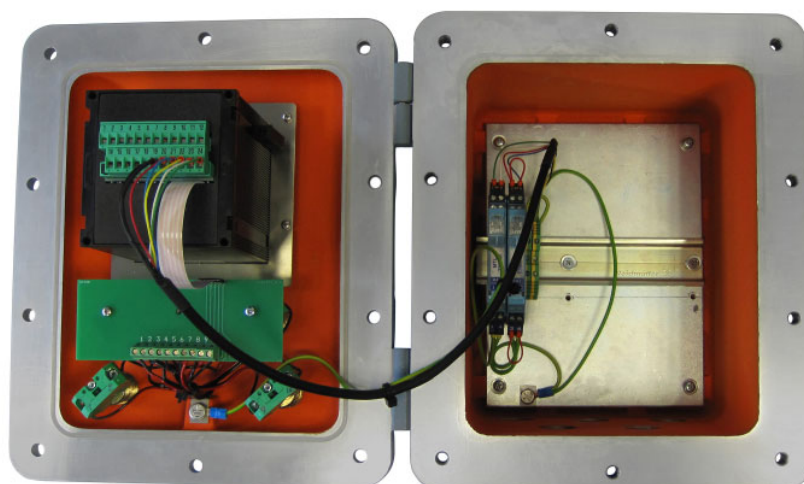
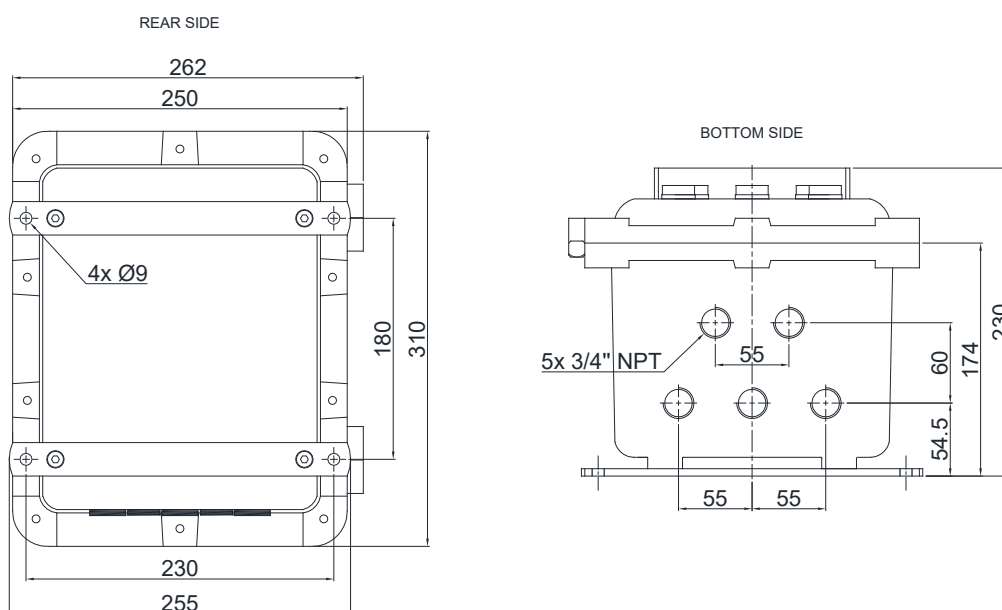
CERTIFICATIONS

-  OIML R76:2006, class III, 3x10000 divisions, 0.2 μ V/VSI / OIML R61 - WELMEC Guide 8.8:2011 (MID)
-  Complies with the Eurasian Customs Union regulations
-  Equivalent of the CE marking for the United Kingdom
-  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 United Kingdom regulations for legal for trade use
-  Complies with Chinese market regulations for legal for trade use

CERTIFICATIONS ON REQUEST

-  Conformity assessment (initial verification) in combination with Laumas weighing module
-  Complies with the Eurasian Customs Union regulations for use in potentially explosive atmospheres
-  Complies with Chinese market regulations 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 ±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 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

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 China: Law on Metrology of the People's Republic of China
Operation mode	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

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

	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 • • • • • •

TREATMENT

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