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) in light aluminum alloy, 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 PROFIBUS · PROFINET

CERTIFICATIONS

OIML	OIML R76:2006, class III, 3x10000 divisions, 0.2 μV/VSI / OIML R61 - WELMEC Guide 8.8:2011 (MID)
EAC	Complies with the Eurasian Customs Union regulations
UKCA	Equivalent of the CE marking for the United Kingdom
NMI TRADE APPROVED	NMI Trade Approved - Complies with Australian market regulations for legal for trade use
NEW ZEALAND TRADE APPROVED	Complies with New Zealand regulations for legal for trade use
UK TRADE APPROVED	Complies with United Kingdom regulations for legal for trade use
PA	Complies with Chinese market regulations for legal for trade use

CERTIFICATIONS ON REQUEST

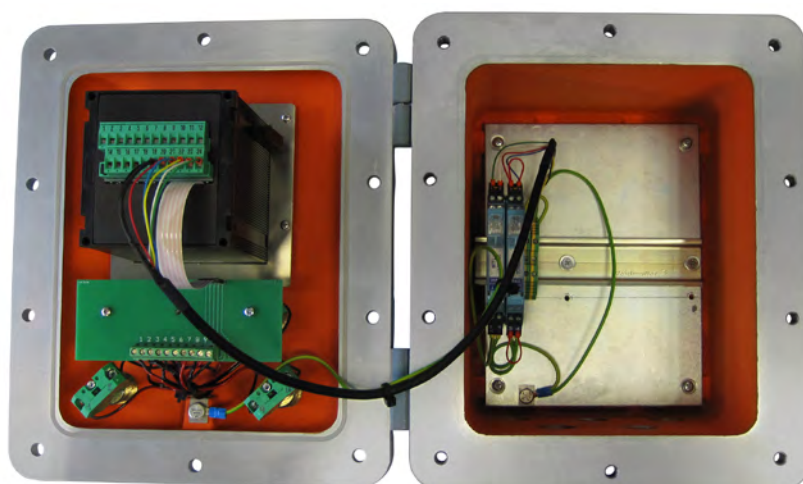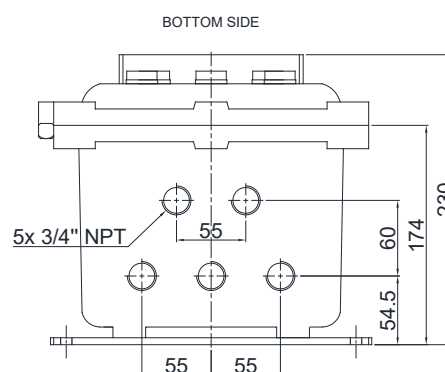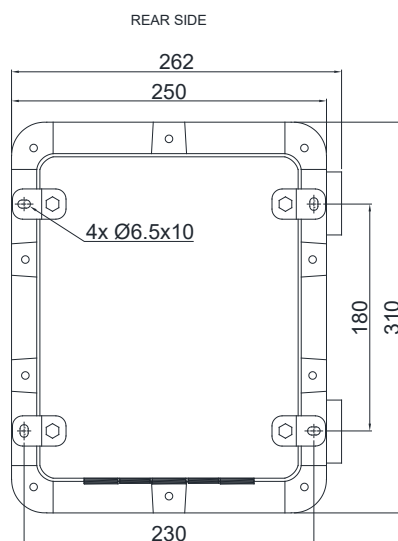|	
M	Conformity assessment (initial verification) in combination with Laumas weighing module
EAC Ex	Complies with the Eurasian Customs Union regulations for use in potentially explosive atmospheres
Ex NEPSI	Complies with Chinese market regulations for use in potentially explosive atmospheres
	Complies with the regulations of the Russian Federation for legal for trade use

DIMENSIONS (mm)

REAR SIDE

262
250
4x Ø6.5x10
180
310
230

BOTTOM SIDE

5x 3/4" NPT
55
230
174
60
54.5
55   55

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
Display range	±999999
Decimals • Display increments	0÷4 • x1 x2 x5 x10 x20 x50 x100
Digital filter • Readings per second	10 levels • 5÷300
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
●	●	●	●	●	●

PI CERTIFIED — 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

		CODE					
	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

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