

ENGLISH



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Installation and User Manual

version 1.0

REPEATER

RIP6100IP65



SYMBOLS

Here are the symbols used in the manual to draw the reader's attention:



Caution! Risk of electric shock.



Caution! This operation must be performed by skilled personnel.



Pay particular attention to the following instructions.



Further information.

WARRANTY

24 months from the date of the delivery note. Warranty covers only failures of defective components (due to construction defects or defects in materials) and includes replacement or repair of the components and related labor costs.

Warranty is automatically forfeited in the event of:

- tampering, deletion, removal of the identification label and/or serial number of the product
- misuse, transformation, alteration, repair of products not carried out by Laumas personnel

Laumas provides a 1-year warranty from the date of the delivery note on defects in material or manufacture of the battery.

GUIDELINES FOR PROPER DISPOSAL



**Sealed Lead Acid
Battery
Must be recycled
Properly**

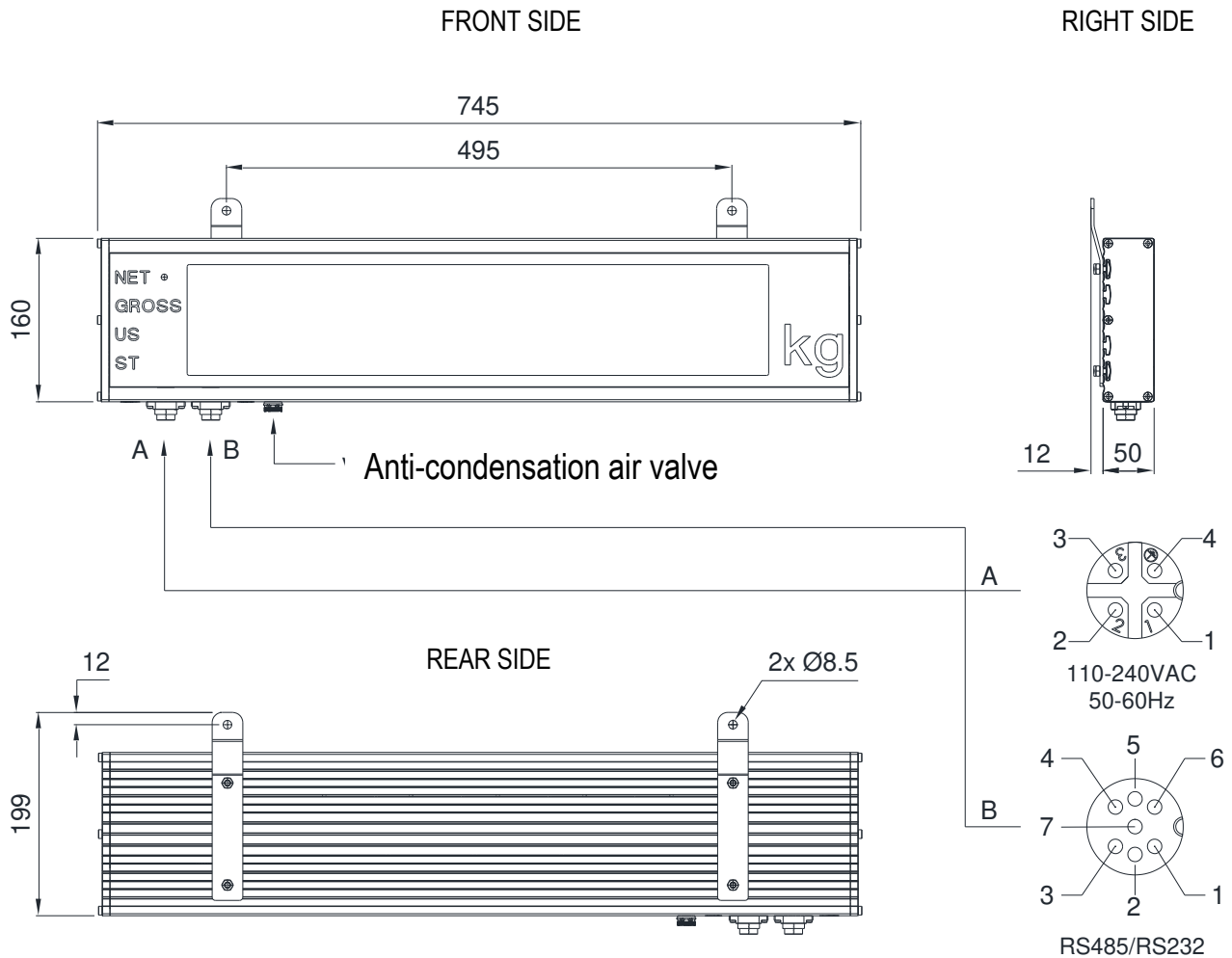
This symbol on the product or packaging indicates that:

- This is electrical/electronic equipment and cannot be disposed of as municipal solid waste, but must be delivered to a recycling center
- Improper use or disposal can pollute the environment or damage human health
- Non-compliance with these guidelines will be penalized in accordance with the regulations in force in the country of destination
- It is recommended to dispose of the packing and packaging as required by local regulations

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DIMENSIONS

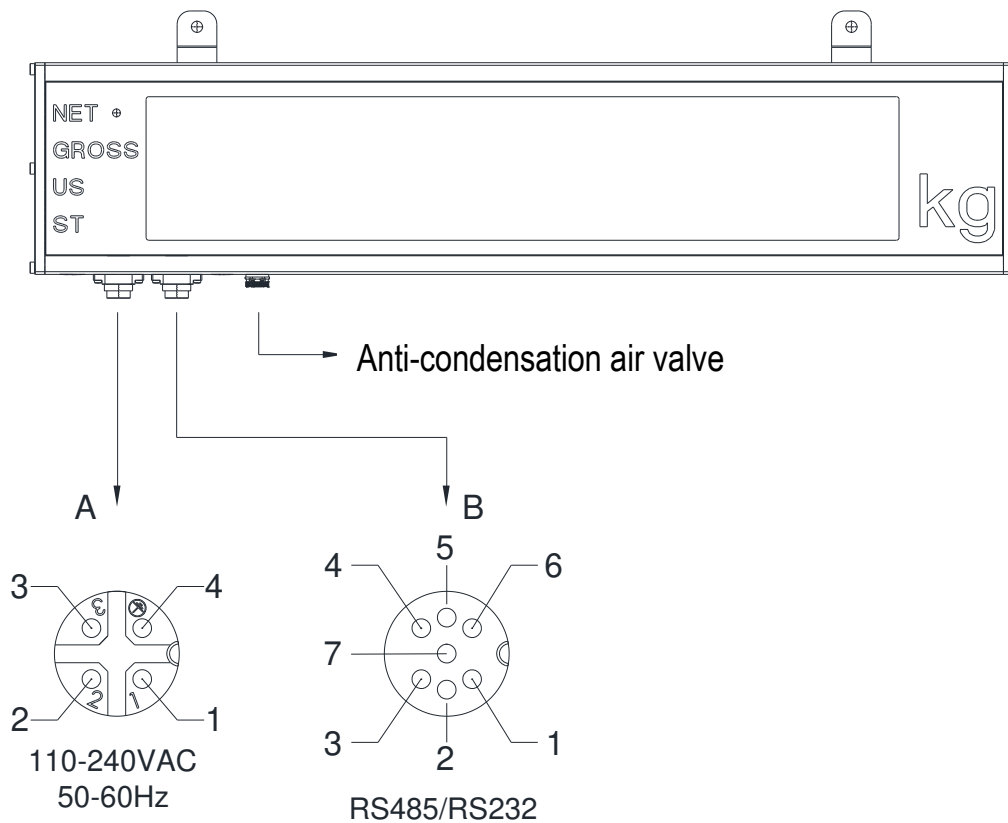


Brackets and bolts included in the supply.

TECHNICAL SPECIFICATIONS

- IP65 anodized aluminum profile box.
- 6-digit semi-alphanumeric bright red LED display, (95 mm height)
- 120° viewing angle from all directions.
- Manual or automatic brightness control based on specific sensor (1-10).
- Serial management of traffic light function.
- Anti-condensation air valve to regulate humidity and pressure within the remote display.
- Power supply 110-240 VAC.
- Power consumption <10 VA.
- Working temperature from -10 °C +50 °C.
- 9600 bps fixed baud rate, 1 start bit, 1 stop bit, no parity.
- 15 available addresses.
- RS232 / RS485 serial ports (automatic detection).
- Programmable via serial communication (it is not necessary to open the box for configuration).

CONNECTORS



A: Power supply	
1	L1
2	N
3	
PE	PE

B: Communication and configuration connector		
1	RS232	RXD
2	RS232	TXD
3	RS485	+
4	RS485	-
5		
6		
7		GND



Connectors and wall-mounting brackets are included in the supply. Wiring is the responsibility of the installer.

SERIAL COMMUNICATION PROTOCOL

Set the communication parameters as follows:

baud rate: 9600; start bit: 1; stop bit: 1; parity: none.

To set address and brightness send a string to the repeater in the following format:

%XYCR

where:

- **%** = ASCII string start character (ASCII code 37)
- **X** = ASCII character corresponding to the address to assign to the remote display: can have the values A, B, C, D, E, F, G, H, I, L, M, N, O, P, T
- **Y** = ASCII character corresponding to the brightness to set on the remote display: can have the following values:
 - o A: automatic brightness setting
 - o 0÷9: manual brightness setting: increasing values from 0 to 9
- **CR** = ASCII string end character (ASCII code 13)

Example: the string %N3CR sets the address as N with a manual brightness at 3 level .

To view the weight send a string to the repeater in the following format:

where

- **&** = ASCII string start character (ASCII code 38)
- **A** = character corresponding to the address of the first part of the string: can have the values A, B, C, D, E, F, G, H, I, L, M, N, O, P, T
- **xxxxxx** = 6 ASCII characters to be shown on the display: can be numbers, letters or the minus "-" character, and can include the character "." representing the decimal point
- **B** = character corresponding to the address of the first part of the string: can have the values A, B, C, D, E, F, G, H, I, L, M, N, O, P, T
- **yyyyyy** = 6 ASCII characters to be shown on the display: can be numbers, letters or the minus "-" character, and can include the character "." representing the decimal point
- **** = ASCII separation character used as string end (ASCII code 92)
- **ckck** = 2 ASCII control characters: corresponds to the two hexadecimal digits obtained by performing the character by character logical XOR operation on characters "AxxxxxxByyyyyy". If there is an error in these characters, the string is ignored

Example: if the byte by byte logical XOR operation carried out on the ASCII codes of the characters of the "AxxxxxxByyyyyy" string returns the hexadecimal value 0x2A, the control characters ckck are "2" and "A".

- **CR** = ASCII string end character (ASCII code 13)

If a string containing two different messages is sent to a pair of appropriately configured remote displays, these will correctly display the two different messages.

1. Example: **&L-00123N-12345\03CR**
the remote display with address L displays “-123”
the remote display with address N displays “-12345”
2. Example: **&A00.023D1.2345\05CR**
the remote display with address A displays “0.023”
the remote display with address D displays “1.2345”

ATTENZIONE: a string can contain two equal address letters; in this case, the message in the second part of the string will be displayed.

Example: **&C000123C000546\...**
the remote display with address C displays “546”

DECLARATION OF CONFORMITY - EU

LAUMAS*Innovation in Weighing*

SISTEMI DI PESATURA INDUSTRIALE - CELLE DI CARICO - BALANCE

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Fabbricante metrico Prot. N. 7340 Parma - R.E.A. PR N. 169833 - Reg. Imprese PR N.19393 - Registro Nazionale Pile
N. IT09060P00000982 - Registro A.E.E. N. IT08020000002494 - N. Mecc. PR 008385 - Cap. Sociale € 100.000 int. vers.

SISTEMA QUALITÀ CERTIFICATO UNI EN ISO 9001 - SISTEMA GESTIONE AMBIENTALE ISO 14001 - MODULO D: GARANZIA DELLA QUALITÀ DEL PROCESSO DI PRODUZIONE

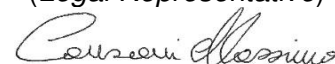
I	Dichiarazione di conformità	Dichiariamo che il prodotto al quale la presente dichiarazione si riferisce è conforme alle norme di seguito citate.
GB	Declaration of conformity	We hereby declare that the product to which this declaration refers conforms with the following standards.
E	Declaración de conformidad	Manifestamos en la presente que el producto al que se refiere esta declaración está de acuerdo con las siguientes normas
D	Konformitäts-erklärung	Wir erklären hiermit, dass das Produkt, auf das sich diese Erklärung bezieht, mit den nachstehenden Normen übereinstimmt.
F	Déclaration de conformité	Nous déclarons avec cela responsabilité que le produit, auquel se rapporte la présente déclaration, est conforme aux normes citées ci-après.
CZ	Prohlášení o shodě	Tímto prohlašujeme, že výrobek, kterého se toto prohlášení týká, je v souladu s níže uvedenými normami.
NL	Conformiteit-verklaring	Wij verklaren hiermede dat het product, waarop deze verklaring betrekking heeft, met de hierna vermelde normen overeenstemt.
P	Declaração de conformidade	Declaramos por meio da presente que o produto no qual se refere esta declaração, corresponde às normas seguintes.
PL	Deklaracja zgodności	Niniejszym oświadczamy, że produkt, którego niniejsze oświadczenie dotyczy, jest zgodny z poniższymi normami.
RUS	Заявление о соответствии	Мы заявляем, что продукт, к которому относится данная декларация, соответствует перечисленным ниже нормам.

Models: RIP6100IP65

Mark Applied	EU Directive	Standards
CE	2014/30/EU EMC Directive	EN 61000-6-2: 2005 EN 61000-6-4: 2007
CE	2014/35/EU Low Voltage Directive	EN 60204-1: 2014 EN 60529: 1991/A1:2000

Montechiarugolo (PR), 28/09/2023

LAUMAS Elettronica s.r.l.
M. Consonni
(Legal Representative)



DECLARATION OF CONFORMITY - UKCA



SISTEMI DI PESATURA INDUSTRIALE - CELLE DI CARICO - BILANCE

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SISTEMA QUALITÀ CERTIFICATO UNI EN ISO 9001 - SISTEMA GESTIONE AMBIENTALE ISO 14001 - MODULO D: GARANZIA DELLA QUALITÀ DEL PROCESSO DI PRODUZIONE

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Models: RIP6100IP65

Mark Applied	UK legislation	Standards
UK CA	Electromagnetic Compatibility Regulations 2016	BS EN 61000-6-2: 2005 BS EN 61000-6-4: 2007
UK CA	Electrical Equipment (Safety) Regulations 2016	BS EN 60204-1: 2014 BS EN 60529: 1991/A1:2000

Montechiarugolo (PR), 28/09/2023

LAUMAS Elettronica s.r.l.
M. Consonni
(Legal Representative)

On our website www.laumas.com there are videos on the guidelines for correct installation of weighing systems and video tutorials on configuring our transmitters and weight indicators.

All Laumas product manuals are available online. You can download the manuals in PDF format from www.laumas.com by consulting the Products section or the Download Area. Registration is required.

Think about the environment before you print!
CERTIFICATION OF THE ENVIRONMENTAL MANAGEMENT SYSTEM
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Laumas contributes to environmental protection by saving on paper consumption.