

MANUAL

EDLG

SIX DIGIT REMOTE DISPLAY

Installation and user manual



Document	Version	Date	Applies to
Installation and user manual	V00x	08/2026	EDLG (L-RIP6100N)

The indoor display: six digits 90 mm high in an aluminium profile box, IP30, 12 V DC with the mains adapter included.
Section 7 describes the command line used to configure it.



Contents

1 About this manual	3
2 Safety, warranty and disposal	3
2.1 User warnings	3
2.2 Warranty	3
2.3 Guidelines for proper disposal	3
3 Product description	3
3.1 Main features	3
3.2 The four signalling LED	3
4 Technical data	4
5 Installation	4
5.1 Mounting	4
5.2 Dimensions	5
6 Electrical connections	5
6.1 The three sockets	5
6.2 RS232 — nine-pin D-sub, sockets	5
6.3 RS485 — nine-pin D-sub, pins	6
6.4 Supply	6
7 Setting the address over the command line	6
7.1 Preparation	6
7.2 The commands	6
7.3 The address letters	6
8 Showing a value	6
8.1 The two check characters	7
8.2 The same address twice	7
9 Approvals and standards	7
10 Service	7

1 About this manual

This manual applies to the six digit remote display **EDLG**, type **L-RIP6100N**. The display repeats a value that it receives over the serial line; it does not weigh and it cannot be calibrated.

The display has no switches inside. Its address is set from a PC over the RS232 port, through a command line — the housing stays shut. Section 7 describes the commands, section 8 the strings that carry the value to be shown.

Values shown in a fixed-width typeface are either texts on the display, commands or characters of a serial string, for example ***protocol N**. Contact numbers refer to the numbers of the nine-pin D-sub connectors.

2 Safety, warranty and disposal

2.1 User warnings

- Read the instructions before installing and using the display.
- Installation, electrical connection and commissioning must be carried out by qualified personnel only.
- The display itself runs on 12 V DC. The supplied mains adapter is connected to 100 to 240 V AC — treat it as mains equipment and keep it dry and accessible.
- Protection is IP30. The display is for indoor use; it is not protected against water.
- Do not use the display outside the ambient conditions stated in section 4.
- Keep this manual available for the whole service life of the display.

2.2 Warranty

24 months from the date of the delivery note. The warranty covers failures of defective components due to construction defects or defects in materials and includes replacement or repair of the components and the related labour costs. The warranty is automatically forfeited in the event of tampering, removal of the identification label or serial number, misuse, transformation, alteration, or repair not carried out by the manufacturer.

2.3 Guidelines for proper disposal

This is electrical and electronic equipment and must not be disposed of as municipal solid waste; it has to be delivered to a recycling centre. Improper use or disposal can pollute the environment or damage human health. Dispose of the packaging as required by local regulations.

3 Product description

3.1 Main features

- Six semi-alphanumeric digits in bright red SMD LED, 90 mm high, readable within 110° from any direction.
- Box made of aluminium profile, IP30 — for indoor use.
- Four signalling LED for net, gross and the stability of the weight.
- RS232 and RS485, both usable for reception; up to fifteen displays on one line, each with its own address.
- 12 V DC at 1.5 A; a mains adapter for 100 to 240 V AC with a 1.2 m cable is included.
- A serial cable of 5 m and wall brackets are included.
- Configured from a PC over the RS232 port — the box does not have to be opened.

3.2 The four signalling LED

Beside the digits sit four LED. They are driven over the serial line, not by a switch on the display:

LED	Meaning
NET	the value shown is a net weight
GROSS	the value shown is a gross weight
UN	the weight is not stable
ST	the weight is stable

4 Technical data

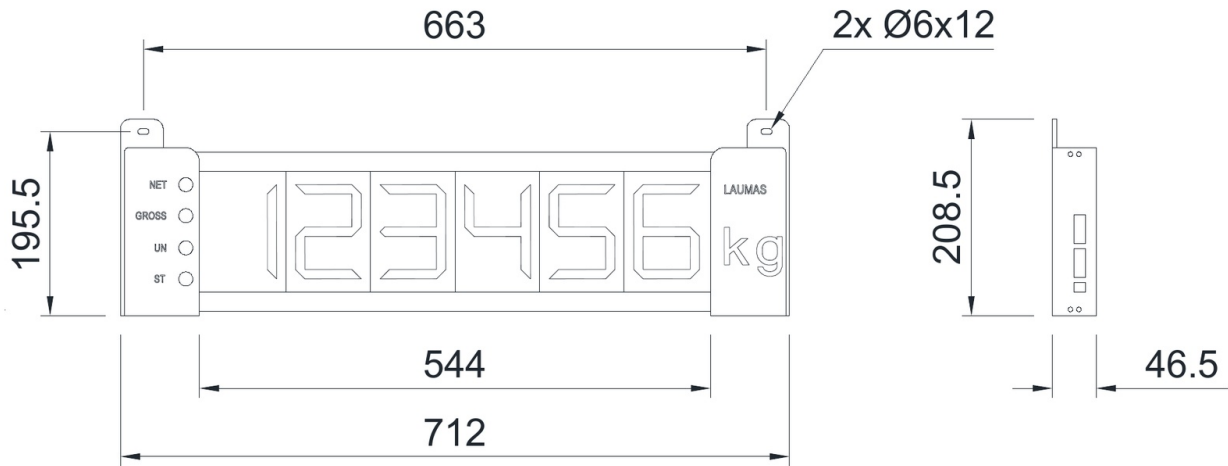
Parameter	Value
Supply voltage	12 V DC, 1.5 A
Mains adapter	100 ... 240 V AC to 12 V DC / 2 A, cable 1.2 m, included
Display	6 digits, semi-alphanumeric, bright red SMD LED, 90 mm high
Viewing angle	110° from all directions
Signalling	4 LED · net, gross, stable, unstable
Serial ports	RS232 · RS485, both usable for reception
Protocol	ASCII
Baud rate	9 600 bit/s, fixed · 1 start bit, 1 stop bit, no parity
Addresses	15 · several displays on one line
Configuration	from a PC over RS232, box stays shut
Working temperature	-10 °C ... +50 °C
Storage temperature	-10 °C ... +60 °C
Humidity	max 80 %, non condensing
Protection rating	IP30 · aluminium profile box
Dimensions	712 x 208.5 x 46.5 mm (Rev 2)
Mounting	wall, 2 x Ø 6 x 12 mm, 663 mm apart (Rev 2)
Included	mains adapter · serial cable 5 m · wall brackets

5 Installation

5.1 Mounting

- Mount the display on a flat wall with the two supplied brackets: holes Ø 6 x 12 mm, 663 mm apart.
- Keep the display readable: within 110° of the front the digits stay legible, beyond that they dim.
- Indoors only. IP30 keeps fingers and solid objects out, not water — do not mount the display where it can be splashed or where condensate can settle on it.
- Place the mains adapter so that it stays dry and can be unplugged. Its cable is 1.2 m long, which decides how far the socket may be.
- The serial cable must not run together with power cables; give it its own path.

5.2 Dimensions



Dimensions in mm · housing Rev 2

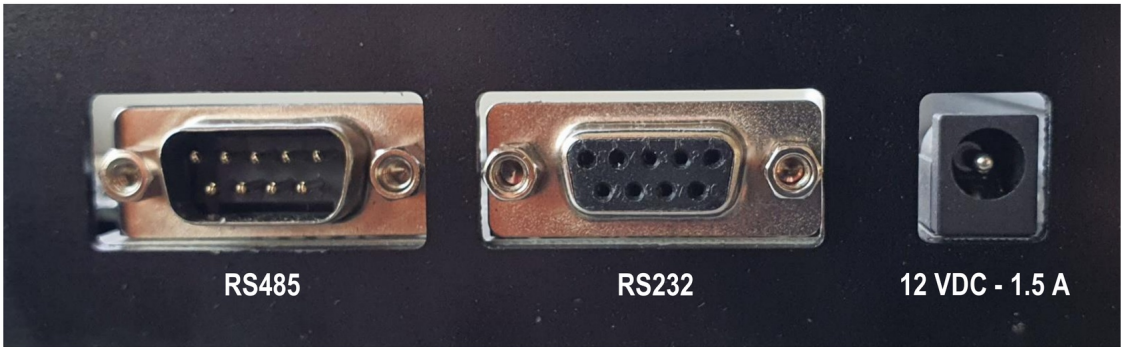
Two housing revisions exist. Older displays were built as **Rev 1**, with different overall dimensions and, above all, **different mounting holes**. When you replace an old display, the existing holes in the wall will not fit the new brackets.

Housing	Width x height x depth	Bracket spacing	Mounting holes
Rev 2 · current	712 x 208.5 x 46.5 mm	663 mm	2 x Ø 6 x 12 mm
Rev 1 · earlier	708 x 199 x 40 mm	675 mm	2 x Ø 8.5 mm

6 Electrical connections

6.1 The three sockets

All three connections sit side by side on the housing: two nine-pin D-sub connectors for the serial lines and a barrel jack for the supply. Either serial port can be used to receive data.



The three connections · RS485, RS232 and 12 V DC

The two D-sub connectors are not the same. RS485 carries **pins**, RS232 carries **sockets**. They sit next to each other and look alike at a glance — check the label, not the shape of the plug on your cable.

6.2 RS232 — nine-pin D-sub, sockets

Contact	Signal
2	TXD
3	RXD
5	SHIELD, GND
1, 4, 6, 7, 8, 9	— not used

6.3 RS485 — nine-pin D-sub, pins

Contact	Signal
3	RS485 +
5	SHIELD, GND
8	RS485 –
1, 2, 4, 6, 7, 9	— not used

The two assignments differ. RS232 uses contacts 2, 3 and 5, RS485 uses 3, 5 and 8. Only the ground is on the same contact — do not derive one assignment from the other.

6.4 Supply

The barrel jack takes **12 V DC at 1.5 A**. The supplied adapter delivers 12 V DC at 2 A from 100 to 240 V AC and is the intended source.

7 Setting the address over the command line

The RS232 port is used for configuration. Set the serial port of the PC to **9600 bit/s, 1 start bit, 1 stop bit, no parity** — the display accepts nothing else.

7.1 Preparation

- Disconnect any devices from the RS485 port of the display.
- Connect the PC to the RS232 port of the display.
- Open a terminal program on the PC with the parameters above.

7.2 The commands

Switch the display on. It sends its identification, the firmware version, the protocol name **TLU** and the address it is currently set to. Then:

Command	What it does
+++	enters the command mode · the display shows MENU and the PC receives Command mode entered .
*help	lists the available command set
*protocol X	sets the address to the letter X · the PC receives the new address and the note that it takes effect after a reset
*exit	leaves the command mode · the display goes dark and the PC receives Leaving command mode

The new address is not active yet. The display keeps the old address until it has been switched **off and on again**. Turn it off, wait a few seconds, turn it on. A display that still answers to the old address has usually not been restarted.

7.3 The address letters

Fifteen addresses are available. The letters are:

Available address letters
A B C D E F G H I L M N O P T

Not the whole alphabet. **J, K, Q, R** and **S** are not addresses, and **T** comes after **P**. Do not continue the row from memory — the missing letters are simply not accepted.

8 Showing a value

One string carries the values for two displays:

String	Meaning
&Axxxxxx Byyyyy \ ckck <CR>	& start character (ASCII 38) · A address of the first display · xxxxxx six characters for it · B address of the second · yyyyyy its six characters · \ separator and string end (ASCII 92) · ckck two check characters · <CR> end character (ASCII 13)

The six characters may be figures, letters or a minus sign, and may include a decimal point. Examples:

String	First display	Second display
&L-00123N-12345\03<CR>	address L shows -123	address N shows -12345
&A00.023D1.2345\05<CR>	address A shows 0.023	address D shows 1.2345

8.1 The two check characters

ckck are the two hexadecimal digits of the character-by-character XOR over the part Axxxxxx Byyyyy. If the XOR yields 0x2A, the check characters are 2 and A.

A wrong checksum is silent. If the check characters do not match, the display ignores the whole string — it shows no error and keeps the previous value. A display that seems frozen is the first symptom of a checksum that is calculated wrongly.

8.2 The same address twice

The second part wins. A string may carry the same address letter twice. Then the second part of the string is what appears — the first is overwritten. Example: &C000123C000546\... leaves the display with address C showing 546.

9 Approvals and standards

Declarations of conformity dated 2025-08-14. The display is supplied from 12 V DC, so only the EMC legislation applies to it:

Mark	Legislation	Standards
CE	EMC Directive 2014/30/EU	EN 55011: 2016+A1+A11: 2020 · EN 61000-6-2: 2019 · EN 61000-6-4: 2019
UKCA	Electromagnetic Compatibility Regulations 2016	BS EN 55011: 2016+A1+A11: 2020 · BS EN 61000-6-2: 2019 · BS EN 61000-6-4: 2019

The data sheet names only UKCA. The manufacturer's data sheet lists the UKCA marking alone under **CERTIFICATIONS**, but the manual contains both declarations. The display carries CE and UKCA.

The display is not an approved weighing instrument and carries no metrological approval. Where a weight has to be legal for trade, the approval belongs to the weighing instrument that sends the value, not to the display that repeats it.

10 Service

For support please state the address the display is set to, whether RS232 or RS485 is wired, the firmware version reported at switch-on, and an example of the string being sent.

octogon GmbH	Roseggerstrasse 16, 8700 Leoben, Austria
Phone	+43 676 3628453
Email	office@octogon.org
Web	www.octogon.org