

Issued by NMI Certin B.V.

In accordance with WELMEC 8.8 2017, EN 45501:2015, OIML R 76-1 (2006), WELMEC 7.2 2023.

Producer Rinstrum Pty Ltd  
Unit 4/31 Henry Street  
Loganholme, Queensland, 4129  
Australia

Measuring instrument An **Indicator**, tested as a part of a weighing instrument.

Type : C3xx Series

Further properties are described in the annexes:

- Description TC12863 revision 0;
- Documentation folder TC12863-1.

- + An overview of performed tests is given in the annex:
  - Description TC12863 revision 0.

Initially issued 15 November 2024

Issuing Authority

**NMI Certin B.V.**  
15 November 2024

Certification Board

**NMI Certin B.V.**  
Thijssseweg 11  
2629 JA Delft  
The Netherlands  
T +31 88 6362332  
certin@nmi.nl  
www.nmi.nl

This document is issued under the provision that no liability is accepted and that the producer shall indemnify third-party liability.

Reproduction of the complete document only is permitted.

This document is digitally signed and sealed. The digital signature can be verified in the blue ribbon on top of the electronic version of this certificate.

## 1 General information about the indicator

All properties of the indicator, whether mentioned or not, shall not be in conflict with the standard mentioned in the certificate.

This certificate is the positive result of the applied voluntary, modular approach, for a component of a measuring instrument, as described in WELMEC 8.8. The complete measuring instrument must be covered by relevant metrological certification that is valid in the country where the instrument is put into use.

### 1.1 Essential parts

Number	Pages	Description	Remarks
12863/0-01	6	Main board	Including parts list

### 1.2 Essential characteristics

Configuration	Analog load cells
Accuracy class	OIML R 76
Weighing ranges	Ⓐ or Ⓑ
Maximum number of scale intervals (one weighing range)	Single interval Multi-interval Multiple range
Maximum number of scale intervals (multi-interval)	$n \leq 10000$
Maximum number of partial weighing ranges	$n \leq 10000$ (per partial weighing range)
Maximum number of scale intervals (multiple range)	3
Maximum number of weighing ranges	$n \leq 10000$ (per weighing range)
Load cell excitation voltage	3
Minimum signal input voltage	5 V DC
Minimum input voltage per verification scale interval	$U_{\min} = 0 \text{ mV}$
	0,3 $\mu\text{V}$

Minimum load cell resistance	43 $\Omega$	
Maximum load cell resistance	3500 $\Omega$	
Fraction of the maximum permissible error	0,5	
Load cell interface	6-wire with sense technology	
Maximum value of the cable length per cross wire section between the indicator and the junction box or load cells	1691,5 m/mm <sup>2</sup>	
Temperature range	-10 °C / +40 °C	
Power supply voltage	5 - 24 V DC, 12/24 V DC road vehicle battery power supply	
Software identification	ADC library	Checksum: 0xE9E5AE66
	DSD library	Checksum: 0xC53C26A5

#### Software:

- The checksum will be displayed:
  - Press and hold the SELECT key until SETUP is displayed.
  - Wait until OPER is displayed.
  - Press SELECT until ALIBI is displayed.
  - Press F2 (OK)
  - The ADC checksum will be displayed followed by the DSD checksum.
- The indicator has embedded software;
- Software specification (WELMEC 7.2):
  - Software type P;
  - Risk Class C;
  - Extension L/S.

#### List of legally relevant functions:

- Determination stability of equilibrium;
- Zero indicating;
- Semi-automatic zero-setting;
- Initial zero-setting;
- Zero-tracking;
- Semi-automatic subtractive tare balancing;
- Preset tare;
- Gravity compensation;
- set-up mode via a button on the main board;
- The adjustment mode is secured with a password, and sealed with an event counter that contains a number that will be incremented each time any parameter changes or adjustment is made and saved;

- Acting upon significant faults;
- Checking the display;
- Weight unit selection (t, kg, g);
- Data Storage Device that complies with OIML R 76 (2006) clause 5.5.3 and EN 45501:2015 clause 5.5.3;
- Long –term Storage Device that complies with WELMEC 7.2 extension L.

### 1.3 Essential shapes

Number	Pages	Description	Remarks
12863/0-02	10	General shape and exploded view	-

The descriptive markings plate is secured against removal by sealing or will be destroyed when removed and contains at least the following information:

- This certificate number TC12863;
- The event counter value;
- Producers name or mark.

The inscriptions Max, Min, e, as required by Directive 2014/31/EU Annex III clause 1.4 are presented in the display by software.

### 1.4 Conditional parts

The indicator may be equipped with one or more of the following protective interfaces that have not to be secured:

- RS232(main board);
- Digital I/O(main board);
- Ethernet(optional board).

### 1.5 Non-essential parts

Display;  
 Keyboard.

## 2 Seals

To secure components that may not be dismantled or adjusted by the user, the indicator has to be secured in a suitable manner on the locations indicated in the drawings:

Number	Pages	Description	Remarks
12863/0-03	6	Sealing	-

The connecting cable of the load cell or the junction box is provided with possibility to seal. Inside the cabinet is an adjustment button located on the main board .

The event counter value can be displayed whenever the instrument is powered up , or setup mode is entered/exited. The setup mode can be entered by long-pressing 'select' button.

The current event counter value matches the counter value mentioned in the inscription.

### **3 Conditions for conformity assessment**

The compatibility of load cells and indicator is established by the manufacturer by means of the compatibility of modules form, contained in EN 45501:2015 clause F.4 at the time of putting into use.

The inscriptions contain the value of the event counter at the time of conformity assessment.

Other parties may use this Evaluation Certificate only with the written permission of the producer.

### **4 Reports**

An overview of performed tests is given in the evaluation report ER12863 revision 0.