

Issued by NMI Certin B.V.

In accordance with WELMEC 8.8 2017, WELMEC 2.1 Issue 4, EN 45501:2015, OIML R 76-1 (2006)

Producer  
Rice Lake Weighing Systems  
230 West Coleman Street  
Rice Lake, WI 54868  
United States of America

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

Type : 882IS  
882IS Plus

Further properties are described in the annexes:

- Description T11166 revision 0;
- Documentation folder T11166-1.

An overview of performed tests is given in the annex:  
- Description T11166 revision 0.

Issuing Authority

**NMI Certin B.V.**  
23 March 2021

Certification Board

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## 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 system must be covered by an EC type-approval certificate, an EC-type examination certificate or an EU-type examination certificate.

### 1.1 Essential parts

Number	Pages	Description	Remarks
11166/0-01	3	Main board including AD-converter	Layout and parts list

EMI protection measures:

- The indicator is built in a metal enclosure;
- The load cell cable is shielded;
- The RS-422 cable(s) from the indicator is (/ are) shielded.

## 1.2 Essential characteristics

Configuration	Analog load cells
Accuracy class OIML R 76	Ⓐ or Ⓑ
Weighing range(s)	Single interval Multi-interval Multiple range
Maximum number of scale intervals (one weighing range)	$n \leq 6500$
Maximum number of scale intervals (multi-interval)	$n \leq 6500$ (per partial weighing range)
Maximum number of partial weighing ranges	3
Maximum number of scale intervals (multiple range)	$n \leq 6500$ (per weighing range)
Maximum number of weighing ranges	3
Load cell excitation voltage	4,6 V DC at 700 $\Omega$ 3,0 V DC at 87,5 $\Omega$
Minimum signal input voltage	$U_{\min} = 0 \text{ mV}$
Minimum input voltage per verification scale interval	0,83 $\mu\text{V}$
Minimum load cell resistance	87 $\Omega$
Maximum load cell resistance	1050 $\Omega$
Fraction of the maximum permissible error	0,5
Load cell connection	6-wire (remote sensing)
Maximum value of the cable length per cross wire section between the indicator and the junction box or load cells	Length 850 m/mm <sup>2</sup> In case a 4-wire connection is used the load cells are connected directly without junction box
Temperature range	-10 °C / +40 °C
Power supply voltage	100 – 240 V AC 50/60 Hz 6 V battery
Software identification	Version number: 1.xx

### Software:

- The identification number will be displayed after pressing the key sequence:
  - Menu;
  - Select Audit;
  - Select LRV.
- The indicator has embedded software.

List of legally relevant functions:

- Determination stability of equilibrium;
- Zero indicating;
- Semi-automatic zero-setting;
- Zero-tracking;
- Semi-automatic subtractive tare weighing;
- Preset tare;
- Changing from Net to Gross and vice versa;
- Net weight accumulation;
- Gravity compensation;
- The adjustment mode is sealed with two event counters (calibration count and configuration count) that contains a number that will be incremented each time any parameter changes or adjustment is made and saved; these counters cannot be reset (if software sealing is used);
- Adjustment / set-up mode via a switch on the main board (if no software sealing is used);
- Checking the display;
- Weight unit selection (t, kg, g);
- Linearity compensation: the linearity can be compensated to a maximum of 5 points for each connected platform.

### 1.3 Essential shapes

Number	Pages	Description	Remarks
11166/0-02	2	Outline drawing	-

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 T11166;
- The values of both event counters (if software sealing is used);
- Producers name or mark.

### 1.4 Conditional parts

Number	Pages	Description	Remarks
11166/0-03	2	Power supply board	Layout and parts list

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

- RS422;
- Digital input;
- Optical input and output.

Optional through an external IO module:

- Ethernet (TCP/IP);
- DeviceNet;
- ProfiNet;
- Profibus;
- Modbus TCP;
- EtherCAT;
- Analog out;
- RS232;
- RS485;
- RS422.

## 1.5 Non-essential parts

Battery.

## 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
11166/0-04	1	Sealing	-

The connecting cable of the load cell or the junction box is provided with possibility to seal.

The event counter values can be displayed by pressing the key sequence:

- Menu;
- Select Audit;
- Select Calibration to show the calibration count;
- Select Configuration to show the configuration count.

## 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 values of both event counters at the time of conformity assessment (in case software sealing is used).

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 reports:

- No. NMI-1901396-01 dated 23 March 2021 that includes 19 pages;
- No. NMI-1901396-02 dated 23 March 2021 that includes 38 pages.

A report can be a test report, an evaluation report, a type evaluation report and/or a pattern evaluation report.