

Issued by NMI Certin B.V.

In accordance with WELMEC 8.8 Issue 2, WELMEC 2.1 Issue 4, EN 45501:2015, OIML R 76-1 (2006).

Producer Rice Lake Weighing Systems
230 West Coleman Street
Rice Lake, WI54868
United States of America

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

Type : 920i

Further properties are described in the annexes:

- Description TC11584 revision 0;
- Documentation folder TC11584-1.

- + An overview of performed tests is given in the annex:
 - Description TC11584 revision 0.

Issuing Authority

NMI Certin B.V.
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C. Oosterman
Head Certification Board

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, or an EU-type examination certificate.

1.1 Essential parts

Number	Pages	Description	Remarks
11584/0-01	2	A/D board (single)	Including parts list
11584/0-02	2	A/D board (dual)	Including parts list
11584/0-03	3	CPU board	Including parts list

EMI protection measures:

- The A/D board is shielded with a metal cover;
- The indicator is built in a metal enclosure;
- Shielded cables to be grounded at the indicator.

1.2 Essential characteristics

Accuracy class	ⓐ or ⓑ
Weighing range	Single interval Multi-interval Multiple range
Maximum number of scale intervals	$n \leq 6000$
Maximum number of (partial) weighing ranges	3
Load cell excitation voltage	10 V DC
Minimum signal input voltage	$U_{\min} = 0 \text{ mV}$
Minimum input voltage per verification scale interval	1 μV
Minimum load cell resistance	21,875 Ω
Maximum load cell resistance	2000 Ω
Fraction of the maximum permissible error	0,5

Load cell connection	4-wire or 6-wire (remote sensing)
Maximum value of the cable length per cross wire section between the indicator and the junction box or load cells	Max 100 m for 4-wire connection 1134 m/mm ² for 6-wire connection
Maximum number of load platforms	28
Temperature range	-10 °C / +40 °C
Power supply voltage	115 V AC or 230 V AC 50/60 Hz 10-60 V DC (not suitable for a road vehicle power supply)
Software identification	Version number: V2.xx (xx is a number between 00 and 99)

Software:

After pressing the following key sequence: "MENU", "AUDIT", the indicator will display:

- The software identification number;
- The event counter designated as "Audit counter".

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 balancing;
- Preset tare;
- Adjustment / set-up mode via a push button on the default interface board;
- The adjustment mode can alternatively be 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;
- Gravity compensation;
- Checking the display;
- Weight unit selection (kg, g);
- Platform select with indication of selected platform;
- Data Storage Device that complies with OIML R 76 (2006) clause 5.5.3 and EN 45501:2015 clause 5.5.3.

1.3 Essential shapes

Number	Pages	Description	Remarks
11584/0-04	1	General look	-

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 TC11584;
- The event counter value (only when using electronic sealing);
- Producers name or mark.

Inside the cabinet is an adjustment lock (push button), located on the default interface board.

1.4 Conditional parts

Number	Pages	Description	Remarks
11584/0-05	2	2-expansion board	Including parts list
11584/0-06	2	6-expansion board	Including parts list
11584/0-07	4	Power supply board PD25	AC/DC
11584/0-08	2	Power supply board PD-65	AC/DC
11584/0-09	6	Power supply board PS5833	DC/DC

The indicator may be equipped with a 2- or 6-expansion board and may be fitted with the following optional cards:

- Single or dual channel A/D board (as described in drawings 11584/0-01 or 11584/0-02);
- Single or dual analogue output card;
- Dual channel serial card;
- 24 channel digital I/O card;
- Memory expansion card;
- Pulse input card;
- Fieldbus interface card (optional modules for EtherNet/IP, DeviceNet, Remote I/O, Profibus DP, ProfiNet or ControlNET interface);
- Ethernet interface card;
- Dual channel Analog input card.

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

- RS232;
- RS485;
- Analogue I/O;

- 20 mA current loop;
- 24 channel digital I/O;
- Pulse input interface;
- Bus interface (optional ethernet/IP, DeviceNET, Remote I/O, ProfiNet, Profibus DP or ControlNET);
- Ethernet (wired or wireless).

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
11584/0-10	3	Sealing	-

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

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

- "MENU";
- "AUDIT".

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 WELMEC 2, 2015 clause 10 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 reports:

- No. TR 432 dated 3 September 2018 that includes 33 pages;
- No. SN 1443 dated 21 March 2019 that includes 12 pages;
- No. P02517 dated 27 March 2019 that includes 14 pages.

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