

OIML Member State
The Netherlands

Issuing authority

NMi Certin B.V.
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Applicant and
Manufacturer

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Identification of the
certified type

**Automatic instrument for weighing road vehicles in motion.
Total vehicle weighing**
Type

: iWIM50_10,
iWIM90_10

Characteristics

See next page

This OIML Certificate is issued under scheme B

This Certificate attests the conformity of the above identified Type (represented by the samples identified in the associated reports, the description R134/2006-B-NL1-20.01 and the appertaining documentation folder R134-20.01-1) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

OIML R 134 - Edition 2006 for accuracy class 10

This Certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML International Recommendation above-identified. This Certificate does not bestow any form of legal international approval.

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Issuing Authority

NMi Certin B.V., OIML Issuing Authority NL1
24 December 2020

Certification Board

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Characteristics of the instrument:

type of instrument	iWIM50_10	iWIM90_10
Accuracy class	10	
Maximum capacity	Max = 20 t	
Minimum capacity	Min = 1,5 t	
Verification scale interval	d = 200 kg	
Maximum number of scale intervals	n = 100 divisions	
Load receptor configuration	1 or more pairs of load receptors on 1 or more lanes	
Vehicle position detection	automatic (cross) lane detection and identification	
Maximum transit speed for all vehicles	50 km/h	
Maximum transit speed for total vehicle weight > 35 t	50 km/h	90 km/h
Maximum number of axles	10	
Temperature range	-10 °C / +40 °C	
Power supply voltage	110 –240 V AC 50/60 Hz	
Application	non-fluid loaded vehicles	
Identification code (hash)	software	8B7DEFE136EDAA0D85947 4D84CA117BB05A5E829
	type specific parameters	922EBC376DD9DB23085B238 40759007E3188996F
		332B660FEDF8A6085CAA87 6110E9EF9CC141FB83
		7138474584A4E4DDFEDE11E FCEE091C9BB5D122B

The conformity was established by the results of tests and examinations provided in the associated type evaluation reports:

- No. NMI-15200071-01 dated 22 July 2016 that includes 36 pages;
- No. NMI-15200071-01-annex dated 22 July 2016 that includes 33 pages;
- No. NMI-2519822-01 dated 24 December 2020 that includes 17 pages.

*Note

The note in Scope (clause 1.1) of OIML R 134-1 reads: "national legislation is advised to prescribe more extensive verification methods when used in automatic mode for enforcement purposes (without police officer present)."

1 General information about the instrument

All properties of the instrument, whether mentioned or not, may not be in conflict with the recommendation.

1.1 Essential parts

Number	Pages	Description	Remark
R134-20.01/0-01	1	Block diagram configuration A and A alternative	-
R134-20.01/0-02	1	Block diagram configuration B	-
R134-20.01/0-03	2	Overview of the configurations A, A alternative and B	-

Configuration A contains the light source and interrogator inside the rack.

Configuration A alternative contains the light source and interrogator inside a separate aluminium box, the acquisition module, inside the rack.

Configuration B contains the acquisition module that is contained within a rack together with a PC.

EMI protection measures:

- Electronics inside metal housing;
- Interrogator and light source inside aluminium closed housing;
- Power supply filter manufacturer Schurter, type KMF1.1191.11.

Electronics:

- Interrogator:

Number	Pages	Description	Remark
R134-20.01/0-04	2	Interrogator layout & parts list	With optical connection to sensor

- InGaAs linear image sensor, manufacturer Hamamatsu, type G11620-512DA.

Mechanical assembly with sensors:

Number	Pages	Description	Remark
R134-20.01/0-05	2	Load receptor with position of sensors	Version 1.1
R134-20.01/0-06	2	Load receptor with position of sensors	Version 1.2
R134-20.01/0-07	1	Specification Fiber Bragg Grating strain gauges	-

1.2 Essential shapes

The instrument is built according to the drawings in clause 1.1.

Markings:

- The markings have to meet the requirements mentioned in OIML R 134 (2006);
- The data plate is fixed to the console of the instrument and secured against removal by sealing or will be destroyed when removed.

The instrument is installed in a fixed position.

1.3 Conditional parts

Power supply, manufacture Anthin, type API324-0540;
 Universal computer with electromagnetic immunity class E2;
 Light source, manufacture DensLight Semiconductors, type DL-BP1-1501A.

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

- USB device.

2 Sealing

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

Number	Pages	Description	Remark
R134-20.01/0-08	1	Sealing acquisition rack	For configuration A
R134-20.01/0-09	1	Sealing of the light source and interrogator in a separate aluminium box (acquisition module)	For configuration A alternative and B

The software is sealed by means of the software identification codes specified in clause "Characteristics of the instrument".

The device specific parameters (configuration & adjustment) are protected with a separate identification code.

The inscriptions contain the value of the global checksum and adjustment date.