





OIML Member State

Czech Republic

OIML Certificate No. R76/2006-A-CZ1-2019.01

OIML CERTIFICATE ISSUED UNDER SCHEME A

OIML Issuing Authority

Name: Czech Metrology Institute

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Applicant

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Manufacturer

Name: LINET spol. s r.o.

Address: Želevčice 5

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Identification of the certified type (the detailed characteristics will be defined in the additional pages)

non-automatic weighing instrument

type: WS17

This OIML Certificate attests the conformity of the above identified type (represented by the sample(s) identified in the OIML type evaluation report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

OIML R 76, Edition: 2006

For accuracy class: III

This OIML Certificate relates only to metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML Recommendation identified above.

This OIML Certificate does not bestow any form of legal international approval.

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

No. 6052-PT-VN001-2019 that includes 14 pages,

No. 6052-PT-CH009-19 that includes 53 pages.

The technical documentation relating to the identified type is contained in documentation file:

No. 0511-UL-N008-19 dated 11. January 2019.

OIML Certificate History

Revision No.	Date	Description of the modification

The OIML Issuing Authority

RNDr. Pavel Klenovský

Director General

Date: 11. June 2019

Cesky Metrological Metrological

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although either may be reproduced in full.

1 Characteristics of the instrument

A self-indicating non-automatic weighing instrument with digital indication intended for use in health services for weighing and monitoring patients, accuracy class III. The instrument is designed as a single range bed scale. The instrument shall comply with design documentation of company LINET s.r.o. for for Multicare MC, Multicare LE, Eleganza 3XC, Eleganza 3, Eleganza 5 and Eleganza 4 products.

1.1 Main metrological characteristics

Max. = 250 kgn = 500e = 0.5 kg

Single range

Accuracy class III

Temperature range $+ 10^{\circ}\text{C}$ to $+ 40^{\circ}\text{C}$

2 Main parts

Electronic part – indicating and processing unit with load cells connections, displaying unit Mechanical part – load receptor designed as a bed, load cells assembly (for 4 load cells) For load cells see section 2.3.

2.1 Indicating and processing unit

Manufacturer	Туре	
Linet spol. s r.o.	WS17	

Principle of measurement: The analogue signal from load cells is amplified and converted to a digital value.

2.1.1 Displaying unit

Displaying unit is available in different versions. In respect of the beds Eleganza 3XC and Eleganza 3 there is one display placed in the leg section. In respect of beds Multicare, Multicare LE, Eleganza 5, Eleganza 4, there are two displays located in the left and right head sideboard.

2.2 Mechanical part and load cells:

The mechanical part consists of the following bed construction types:

- Multicare
- Multicare LE
- Eleganza 3XC
- Eleganza 3
- Eleganza 5
- Eleganza 4

and the assembly of the load cells. The load cells are assembled on a bracket on a column unit. The bed is equipped by 4 load cells.

2.3 Load sensors

Manufacturer	Туре
Linet spol. s r.o.	L6ELB-C1-300kg-1,65-W1L

 $E_{\text{max}} = 300 \text{kg}$

Accuracy class C1

4-wire connection

3 Main characteristic and functions

- Indication stabilization device
- semi-automatic zero setting
- subtractive tare
- "HOLD / FREEZE" function
- zero indication
- extended displaying device
- gravity constant set up
- manual storing of measured values

3.1 Semi-automatic zero setting

- up to 4% Max

3.2 Tare device

- subtractive up to 249.5 kg

3.2.1 Special tare function - "HOLD / FREEZE"

"Freeze" mode of weight value. Allows attachment or removal of the bed facilities without changing the weight. The function is only possible at the equilibrium. This function is not described in OIML R 76.

3.3 Overload

At overload over 9e, the "Hi" icon appears on the display.

3.4 Underloading

At underload the display shows the "Lo" icon

3.5 Extended displaying device

Displaying of indication with a value of a segment lower than e (0.1 kg) is possible by pressing the "0.5 / 0.1 kg" button for a period not exceeding 5 seconds.

3.6 Manual storing of measured values

The model with an LCD display has a function of manual storing of measured values. Pressing the button with a disk icon allows saving of the current measured value from the primary display into the chart.

4 Interface

Not available

5 Software

The scales are equipped with embedded software. The individual parts of the scales system (AD converter, control unit, display) contain a processor with the appropriate embedded firmware which provides the corresponding functions of each unit.

5.1 Software identification

Firmware identification for each component is provided by version number, see the table below.

Compon	ent	FW version	Typical use
AD converter		8.00, 8.01, 8.10	in all types of beds
			Eleganza 3XC,
Control unit (CU)	PB43	8.11 and higher	Eleganza 4
	PB46	9.10 and higher	Eleganza 5, Multicare

Display types	display	8.20 and higher	Eleganza 3XC
	iBoard basic	1.02, 1.10 and higher	Eleganza 4
	iBoard	1.07 and higher	Eleganza 5
	LE display	8.21 and higher	Multicare
	LCD	8.13 and higher	Multicare

The control unit and the display show the version which meets the requirements of the OIML R76 (2006) standard in respect of which the legally relevant part of the firmware is invariable. The version of the control unit and the display is in the x.yy format, where x indicates the legally relevant part and yy any changes and amendments which do not affect the legally relevant part of the firmware.

Stating of the FW version in the format without a decimal point, i.e., instead of the version number of the AD converter "8.00", to display "800" or "0800"is also possible.

The firmware version of the individual components of the scales system is viewable on the display. Procedure of reading the identification differs according to the display type.

5.2 Software security

The individual components of the instrument must be secured against unauthorized disassembly or replacement of components or their part by means of a security label.

Legally relevant parameters are the constants of the individual load cells and the gravitational constant. Each change of any of these parameters is recorded in the change counter - in the "Number of Calibrations" parameter.

The value of the change counter from the time of commissioning / from the last verification of the instrument shall be legibly and indelibly marked in the vicinity of the main label of the scales.

The procedure for reading the current value of the change counter (number of adjustments / settings) differs according to the display type.

6 Leveling

The instrument is equipped with a lever indicator with sensitivity of at least 2 mm at 2/1000.

7 Sealing

The main plate is secured against removal or shall be destroyed when tried to be removed.

Assess to the set-up mode is secured by an enter code and a calibration counter. The calibration counter is increased after each set up. The number of the last enter shall be affixed and secured near of the main data plate.

7.1 Load Cell Junction Box

If a load cell junction box exists, it must be secured by led and wire seals or security labels.