Czech Metrology Institute
Notified Body No. 1383
Okružní 31, 638 00 Brno, Czech Republic
tel. +420 545 555 111, fax +420 545 222 728
www.cmi.cz

V 3112

EU-TYPE EXAMINATION CERTIFICATE

Number: TCM 128/15 - 5326

Addition 5

This addition replaces all previous versions of this certificate in full wording.

In accordance: with Directive 2014/31/EU of the European Parliament and of the Council on the harmonization of the laws of the Member States relating to the making available on the market of non-automatic weighing instruments (implemented in Czech Republic by Government Order No. 121/2016 Coll.).

Manufacturer: RADWAG WAGI ELEKTRONICZNE Witold Lewandowski
Toruńska 5
26-600 Radom
Poland

For: non-automatic weighing instrument, single or multi range

type PS xxx.X2.yyy	PS xxx.X2.M.yyy or MS xxx.X2.yyy
Accuracy class: II	Accuracy class: II
Max ≤ 10 000 g	Max ≤ 8 100 g
e ≥ 10 mg , 0,1e ≤ d ≤ e	e ≥ 100 mg , 0,1e ≤ d ≤ e
n ≤ 100 000e	n ≤ 81 000e
Temperature range + 10°C / + 40°C	Temperature range + 10°C / + 40°C

Valid until: 20 September 2025

Document No: 0511-CS-A033-15

Description: Essential characteristics, approved conditions and special conditions, if any, are described in this certificate.

Date of issue: 23 August 2022

Certificate approved by:

Český metrologický institut -3-

Ing. František Staněk, PhD.

1 Characteristic of the weighing instrument

Instrument PS xxx.X2.yyy model series operates on basis of electromagnetic compensation of weighed load. Instrument of two equivalent names PS xxx.X2.M.yyy or MS xxx.X2.yyy model series operates on the basis of monolithic mechanism that feature a measuring range up to 8100g. High resolution, repeatability and measuring range of the PS xxx.X2.yyy series is maintained by highly stable electronic and mechanical components, as well as application of automatic internal adjustment system. Balance has full graphic display, plastic cover, stainless steel plate, automatic internal adjustment system. The type designation is PS xxx.X2.yyy (remove ???). Symbol xxx means Max (g) and symbol yyy means special purpose of balance. Symbol xxx stands for Max (g) and symbol yyy stands for special purpose of balance e.g. jewelry balance – CT.

Description of the instrument:

Description	**Drawing number**
Schedule of balance working	PS.X2-10-1000, sheet 1/3, sheet 2/3, sheet 3/3 PS.X2-10-6000, sheet 1/3, sheet 2/3, sheet 3/3
Side view	Drawing 1
Localization of nominal label and data plate	Drawing 2 (PS.X2-10-1010) Drawing 2 (PS.X2-10-6010)
Display	Drawing 3
Views of the balance and with open case	PS.RX-10-10100 sheet 1/3 to 3/3;PSRY-020 (1-2)
Location of sealing and main label	PS.X2-10-10110, PS.X2-20-1010

2 Main metrological characteristic

Type	**PS 200/2000.X2**	**PS 250.X2**	**PS 1000.X2**	**PS 1500.X2**	**PS 6000.X2**
Maximum - Max	200/2000 g	250 g	1000 g	1500 g	6000 g
Minimum - Min	20/500 mg	20 mg		500 mg	
Resolution – d	1/10 mg	1 mg		10 mg	
Verification interval – e	10/100 mg	10 mg		100 mg	
Tare range – T	-200/-2000 g	-250 g	-1000 g	-1500 g	-6000 g
Working temperature	+10 °C / +40 °C				
Supply	100 V – 240 VAC, 50-60 Hz / 12 – 16 VDC				
Accuracy class	(II)				

Type	**PS 1200.X2.M** / **MS 1200.X2**	**PS 2100.X2.M** / **MS 2100.X2**	**PS 4500.X2.M** / **MS 4500.X2**	**PS 6000.X2.M** / **MS 6000.X2.M**	**PS 8100.X2.M** / **MS 8100.X2.M**
Maximum - Max	1200 g	2100 g	4500 g	6000 g	8100 g
Minimum - Min	500 mg				
Resolution – d	10 mg				
Verification interval – e	100 mg				
Tare range – T	-1200 g	-2100 g	-4500 g	-6000 g	-8100 g
Working temperature	+10 °C / +40 °C				
Supply	100 V – 240 VAC, 50-60 Hz / 12 – 16 VDC				
Accuracy class	(II)				

The above tables contain some examples of models within the approved range.

3 Essential characteristics and devices

The instruments must be equipped with a level indicator with a sensitivity of at least 2 mm for a tilt of 2/1000. Devices:

- Zero indicator
- Stability indicator
- Automatic span adjustment with internal calibration mass
- Checking the display
- Initial zero-setting
- Zero-tracking
- Data Storage Device (Alibi Memory)
- Service menu via switch on the main board
- Printer
- Add display
- USB
- Ethernet
- Weighing in carat units*)

*) For instruments that are able to display in both units if the Max, Min and e values are on a label then they must be marked on the instrument in both units. If the values are shown on a display, then they can be switched.

3.1 Data Storage Device (Alibi memory)

Models of PS xxx.X2.yyy balances are equipped with a Data Storage Device (Alibi memory) acting as a long term memory. It automatically saves weighing results according to principles of WELMEC 2.5 in the internal flash memory. A program operates as a simple embedded software without any operating system which prevents from running any external application. The program allows to upload the content of the alibi memory to an external flash drive for archival purposes. The program does not allow to download the alibi memory content to the balance. Each measurement is identified by the following data:

- Measurement date
- Measurement time
- Measurement value (mass)
- Tare value
- Operator (if logged on)
- Product (if chosen)

The memory size allows to save 500 000 weighing results. After the full capacity is reached the single records of the oldest data are overwritten by new data. Single records and the whole database are protected by checksums. Any corruption of data prevents them from viewing or printing.

4 Interfaces

Interfaces used must comply Interfaces used must comply with the paragraph 8.4 of the Annex 1 of the Directive 2014/31/EU and 5.3.6 of EN 45501:2015. Following interface is used: RS 232, USB 2.0, Ethernet 10/100Mbit. Optionally the balances may be equipped in wireless interfaces WiFi.

4.1 Software

Instruments are equipped with embedded software that is used in a fixed hardware and software environment and cannot be modified or uploaded via any interface or by other means after securing and/or verification. Software identification by its version number is accessible after pressing ON/OFF key on the overlay.
The valid software version is: 2.2.0, 2.2.1 and 2.2.2.

5 Non-essential devices

When non-essential device is connected to an electronic instrument through an appropriate interface the metrological qualities of the instrument shall not be adversely influenced.

6 Securing components and verification marks

To secure components that may not be dismantled or adjusted by the user, the non-automatic weighing instrument has to be secured in a suitable manner on the locations indicated in the relevant drawings.

7 CE-mark of conformity and inscription

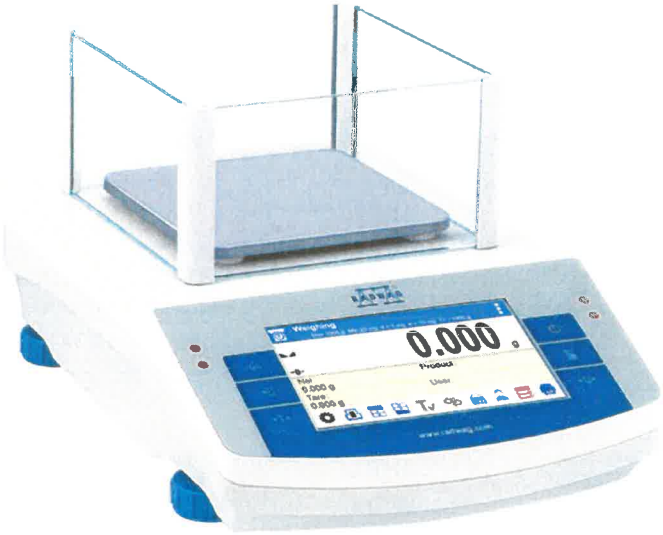
The marks, facilities for the marks and the inscriptions on the non-automatic weighing instruments must fulfill the requirements of the Directive 2014/31/EU.

The markings: Max..., Min..., e..., d... if d ≠ e shall also be shown near the display of the result if they are not already located there.

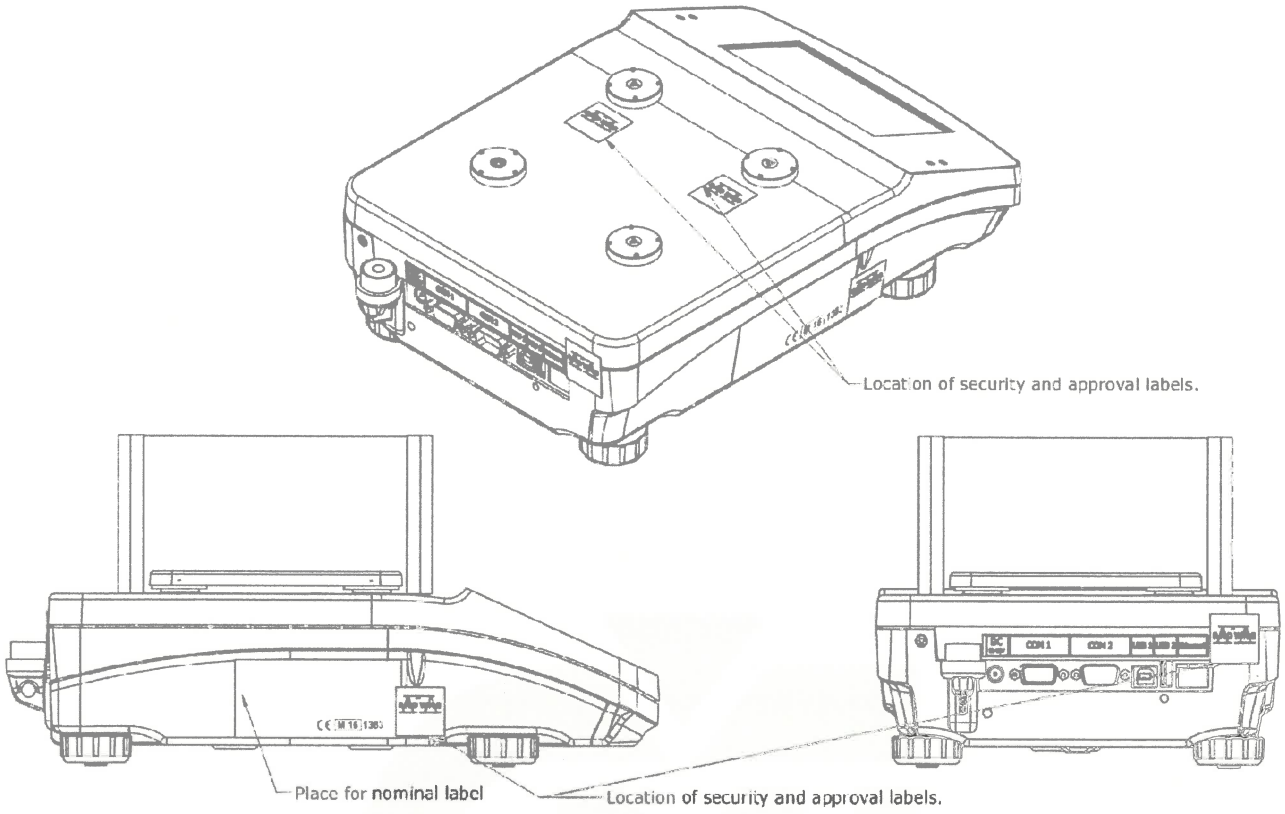
8 Test carried out

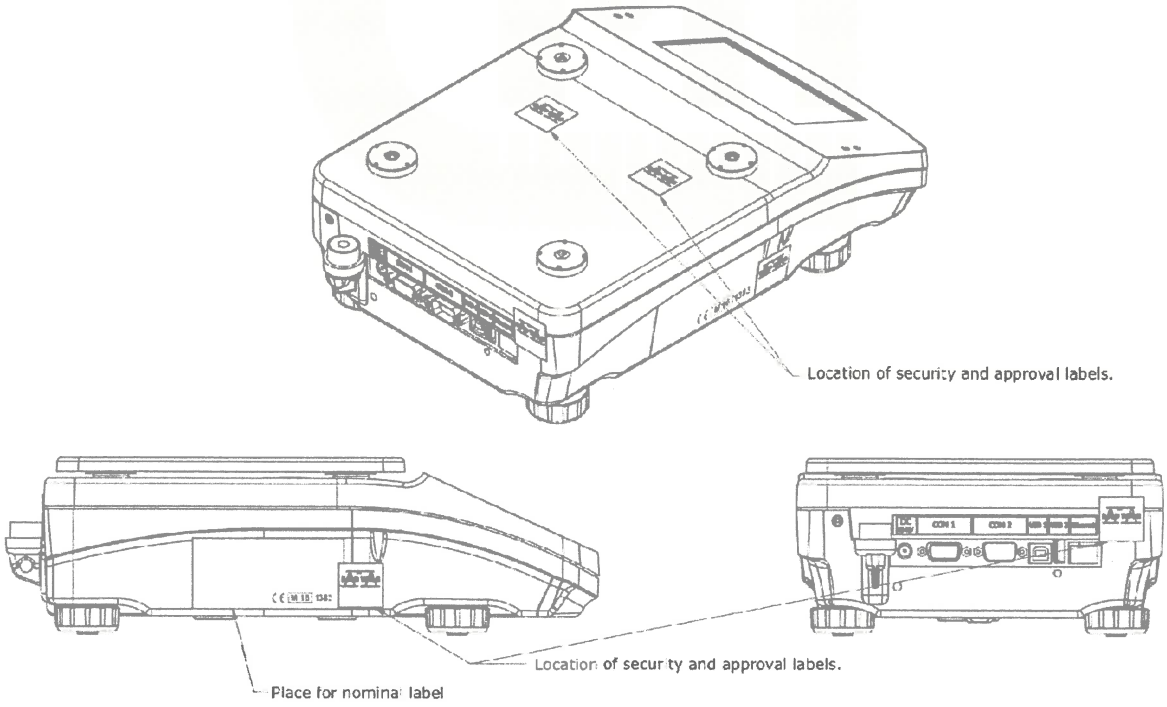
Tests and evaluation carried out are in compliance with EN 45501:2015. Tests are described in the Evaluation Report No. 6052-ER-N062-22.

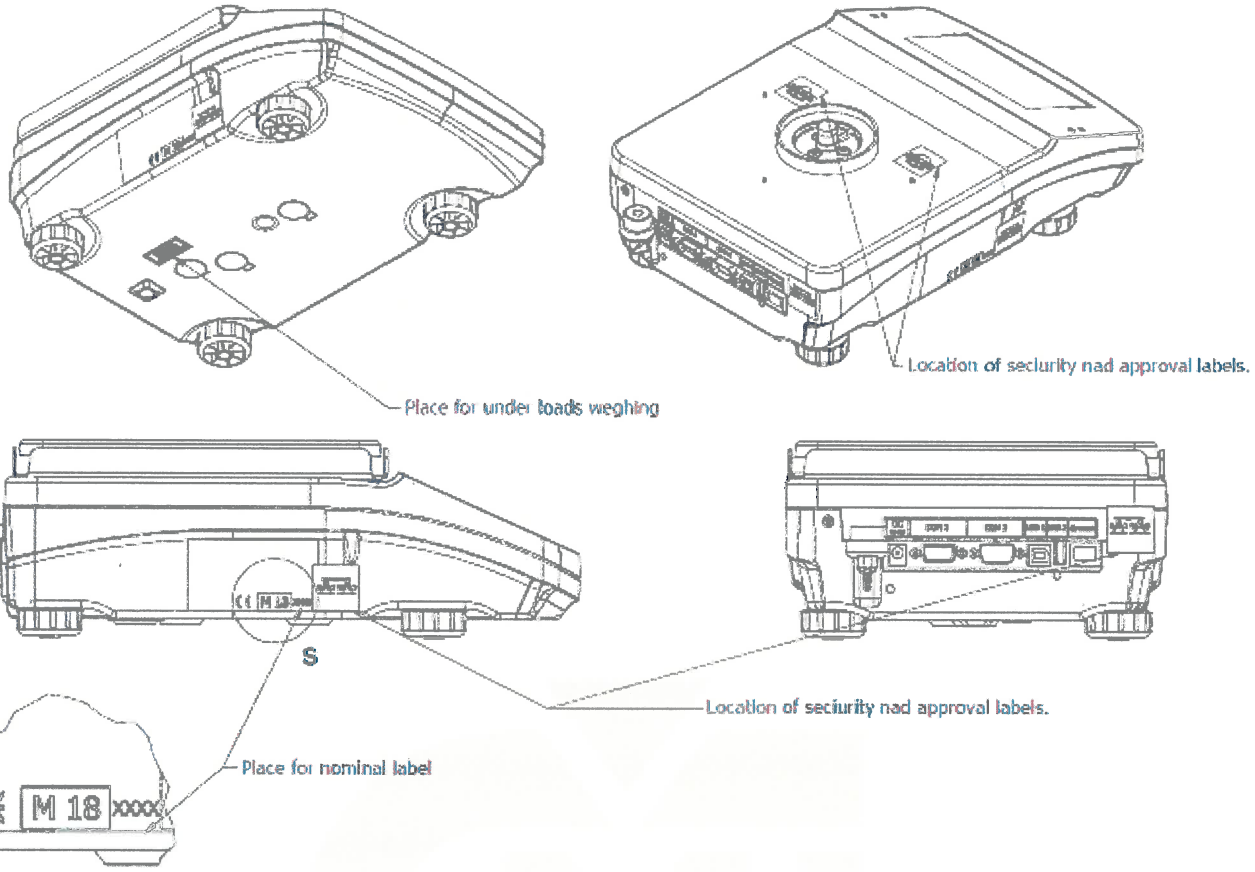
Drawing 1 - Side view:

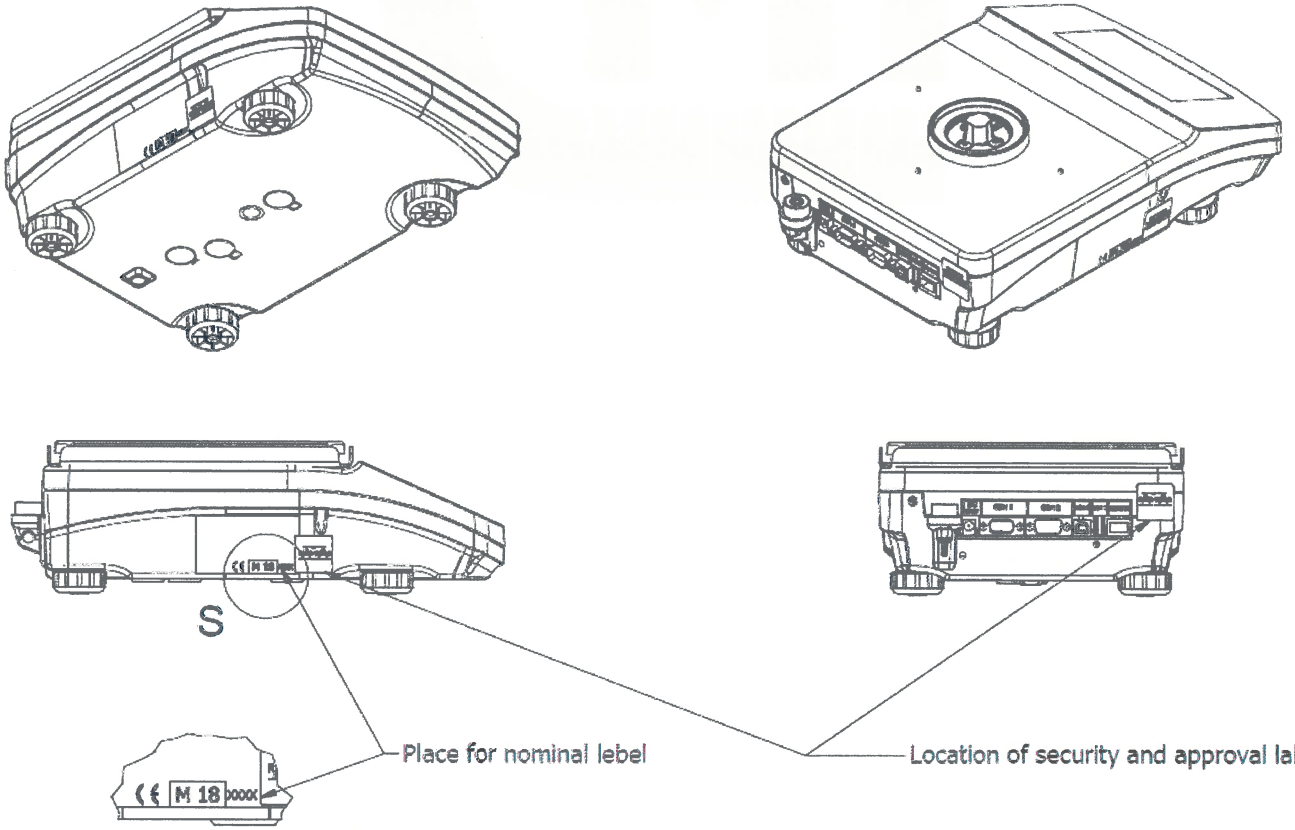


Drawing 2 - Main label position and sealing schemes:






Place for under loads weighing
Location of seciurity nad approval labels.
S
Location of seciurity nad approval labels.
Place for nominal label
M 18 xxxx


S
Place for nominal lebel
Location of security and approval labels.
M 18 xxxx

Drawing 3 – Overlays with display

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EU-TYPE EXAMINATION CERTIFICATE

Number: TCM 128/15 - 5326

Addition 4

This addition replaces all previous versions of this certificate in full wording.

In accordance: with Directive 2014/31/EU of the European Parliament and of the Council on the harmonisation of the laws of the Member States relating to the making available on the market of non-automatic weighing instruments (implemented in Czech Republic by Government Order No. 121/2016 Coll.).

Manufacturer: RADWAG WAGI ELEKTRONICZNE Witold Lewandowski
Toruńska 5
26-600 Radom
Poland

For: non-automatic weighing instrument, single or multi range

type PS xxx.X2.yyy	PS xxx.X2.M.yyy or MS xxx.X2.yyy
Accuracy class: II	Accuracy class: II
Max ≤ 10 000 g	Max ≤ 8 100 g
e ≥ 10 mg , 0,1e ≤ d ≤ e	e ≥ 100 mg , 0,1e ≤ d ≤ e
n ≤ 100 000e	n ≤ 81 000e
Temperature range + 10°C / + 40°C	Temperature range + 10°C / + 40°C

Valid until: 20 September 2025

Document No: 0511-CS-A033-15

Description: Essential characteristics, approved conditions and special conditions, if any, are described in this certificate.

Date of issue: 14 February 2020

Certificate approved by:

Český metrologický institut -3-

RNDr. Pavel Klenovský

1 Characteristic of the weighing instrument

Instrument PS xxx.X2.yyy model series operates on basis of electromagnetic compensation of weighed load. Instrument of two equivalent names PS xxx.X2.M.yyy or MS xxx.X2.yyy model series operates on the basis of monolithic mechanism that feature a measuring range up to 8100g. High resolution, repeatability and measuring range of the PS xxx.X2.yyy series is maintained by highly stable electronic and mechanical components, as well as application of automatic internal adjustment system. Balance has full graphic display, plastic cover, stainless steel plate, automatic internal adjustment system. The type designation is PS xxx.X2.yyy (remove ???). Symbol xxx means Max (g) and symbol yyy means special purpose of balance. Symbol xxx stands for Max (g) and symbol yyy stands for special purpose of balance e.g. jewelry balance – CT.

Description of the instrument:

Description	**Drawing number**
Schedule of balance working	PS.X2-10-1000, sheet 1/3, sheet 2/3, sheet 3/3 PS.X2-10-6000, sheet 1/3, sheet 2/3, sheet 3/3
Side view	Drawing 1
Localization of nominal label and data plate	Drawing 2 (PS.X2-10-1010) Drawing 2 (PS.X2-10-6010)
Display	Drawing 3
Views of the balance and with open case	PS.RX-10-10100 sheet 1/3 to 3/3
Location of sealing and main label	PS.X2-10-10110

2 Main metrological characteristic

Type	**PS 200/2000.X2**	**PS 250.X2**	**PS 1000.X2**	**PS 1500.X2**	**PS 6000.X2**
Maximum - Max	200/2000 g	250 g	1000 g	1500 g	6000 g
Minimum - Min	20/500 mg	20 mg		500 mg	
Resolution – d	1/10 mg	1 mg		10 mg	
Verification interval – e	10/100 mg	10 mg		100 mg	
Tare range – T	-200/-2000 g	-250 g	-1000 g	-1500 g	-6000 g
Working temperature	+10 °C / +40 °C				
Supply	100 V – 240 VAC, 50-60 Hz / 12 – 16 VDC				
Accuracy class	(II)				

Type	**PS 1200.X2.M** **MS 1200.X2**	**PS 2100.X2.M** **MS 2100.X2**	**PS 4500.X2.M** **MS 4500.X2**	**PS 6000.X2.M** **MS 6000.X2.M**	**PS 8100.X2.M** **MS 8100.X2.M**
Maximum - Max	1200 g	2100 g	4500 g	6000 g	8100 g
Minimum - Min	500 mg				
Resolution – d	10 mg				
Verification interval – e	100 mg				
Tare range – T	-1200 g	-2100 g	-4500 g	-6000 g	-8100 g
Working temperature	+10 °C / +40 °C				
Supply	100 V – 240 VAC, 50-60 Hz / 12 – 16 VDC				
Accuracy class	(II)				

The above tables contain some examples of models within the approved range.

Český metrologický institut

3 Essential characteristics and devices

The instruments must be equipped with a level indicator with a sensitivity of at least 2 mm for a tilt of 2/1000. Devices:

- Zero indicator
- Stability indicator
- Automatic span adjustment with internal calibration mass
- Checking the display
- Initial zero-setting
- Zero-tracking
- Data Storage Device (Alibi Memory)
- Service menu via switch on the main board
- Printer
- Add display
- USB
- Ethernet
- Weighing in carat units*)

*) For instruments that are able to display in both units if the Max, Min and e values are on a label then they must be marked on the instrument in both units. If the values are shown on a display, then they can be switched.

3.1 Data Storage Device (Alibi memory)

Models of PS xxx.X2.yyy balances are equipped with a Data Storage Device (Alibi memory) acting as a long term memory. It automatically saves weighing results according to principles of WELMEC 2.5 in the internal flash memory. A program operates as a simple embedded software without any operating system which prevents from running any external application. The program allows to upload the content of the alibi memory to an external flash drive for archival purposes. The program does not allow to download the alibi memory content to the balance. Each measurement is identified by the following data:

- Measurement date
- Measurement time
- Measurement value (mass)
- Tare value
- Operator (if logged on)
- Product (if chosen)

The memory size allows to save 500 000 weighing results. After the full capacity is reached the single records of the oldest data are overwritten by new data. Single records and the whole database are protected by checksums. Any corruption of data prevents them from viewing or printing.

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Interfaces used must comply Interfaces used must comply with the paragraph 8.4 of the Annex 1 of the Directive 2014/31/EU and 5.3.6 of EN 45501:2015. Following interface is used: RS 232, USB 2.0, Ethernet 10/100Mbit. Optionally the balances may be equipped in wireless interfaces WiFi.

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The valid software version is: 2.2.0, 2.2.1 and 2.2.2.

5 Non-essential devices

When non-essential device is connected to an electronic instrument through an appropriate interface the metrological qualities of the instrument shall not be adversely influenced.

6 Securing components and verification marks

To secure components that may not be dismantled or adjusted by the user, the non-automatic weighing instrument has to be secured in a suitable manner on the locations indicated in the relevant drawings.

7 CE-mark of conformity and inscription

The marks, facilities for the marks and the inscriptions on the non-automatic weighing instruments must fulfill the requirements of the Directive 2014/31/EU.

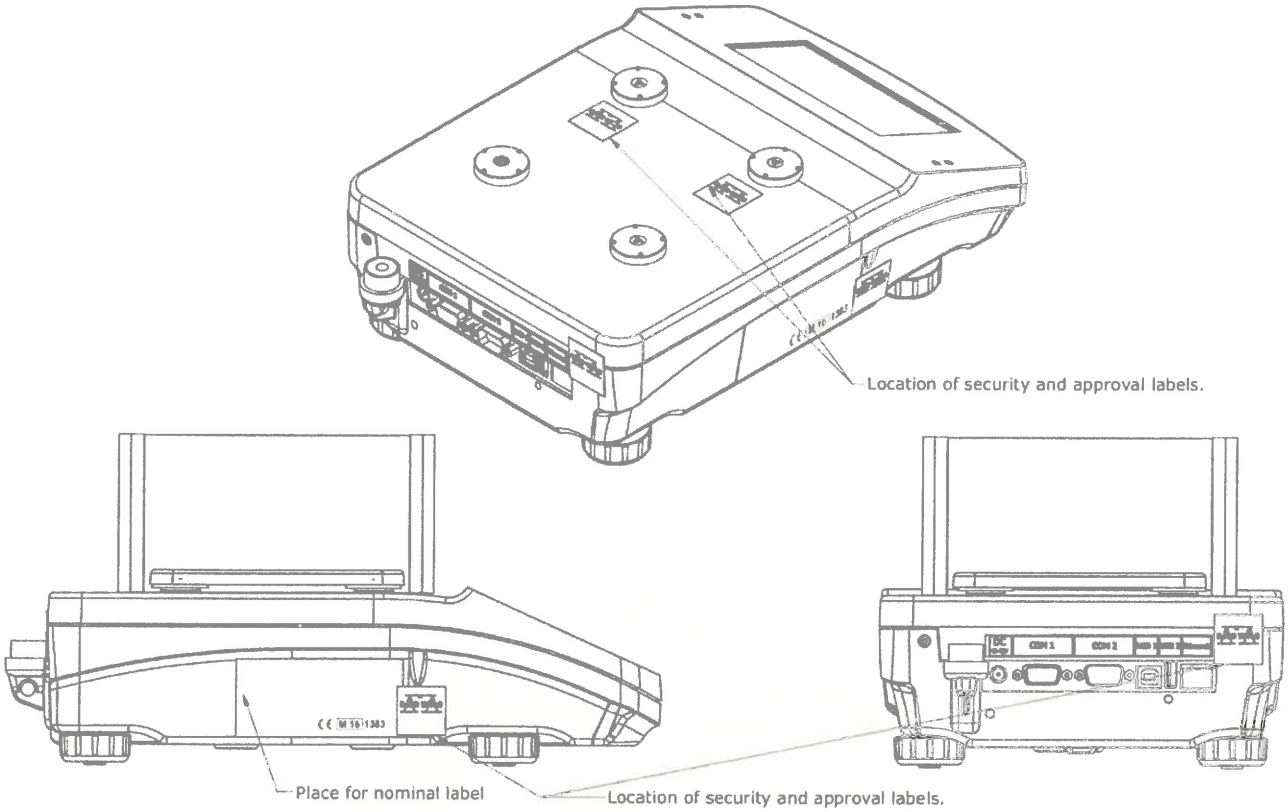
The markings: Max..., Min..., e..., d... if d ≠ e shall also be shown near the display of the result if they are not already located there.

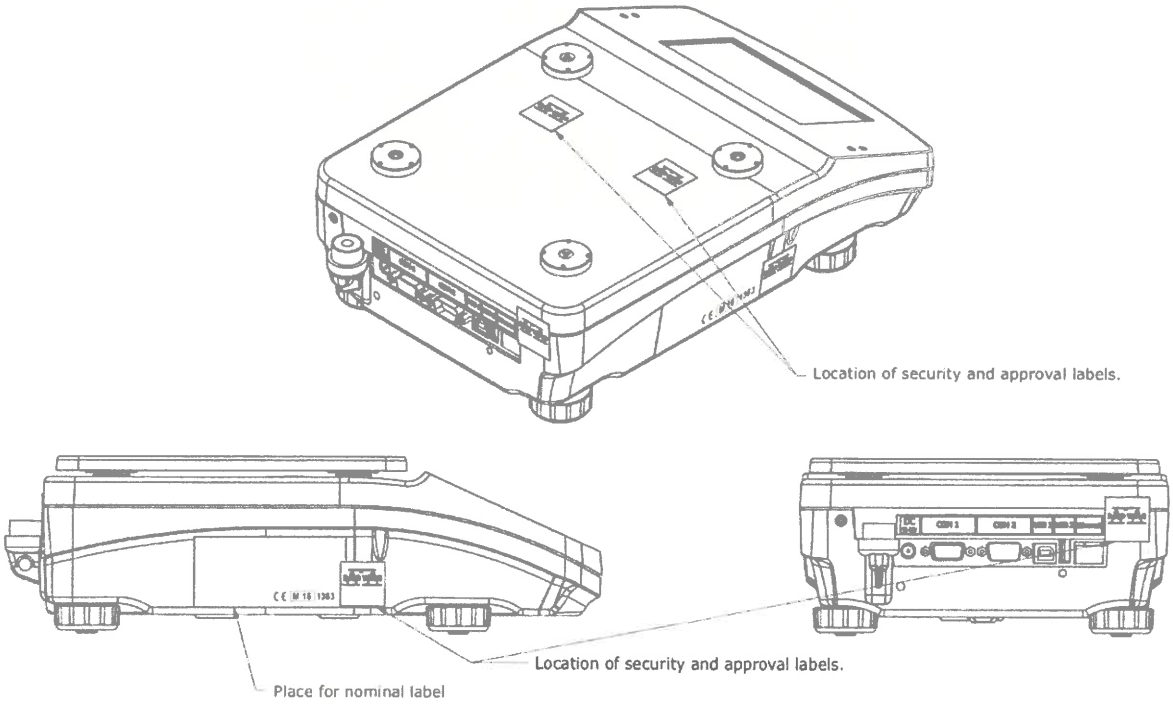
8 Test carried out

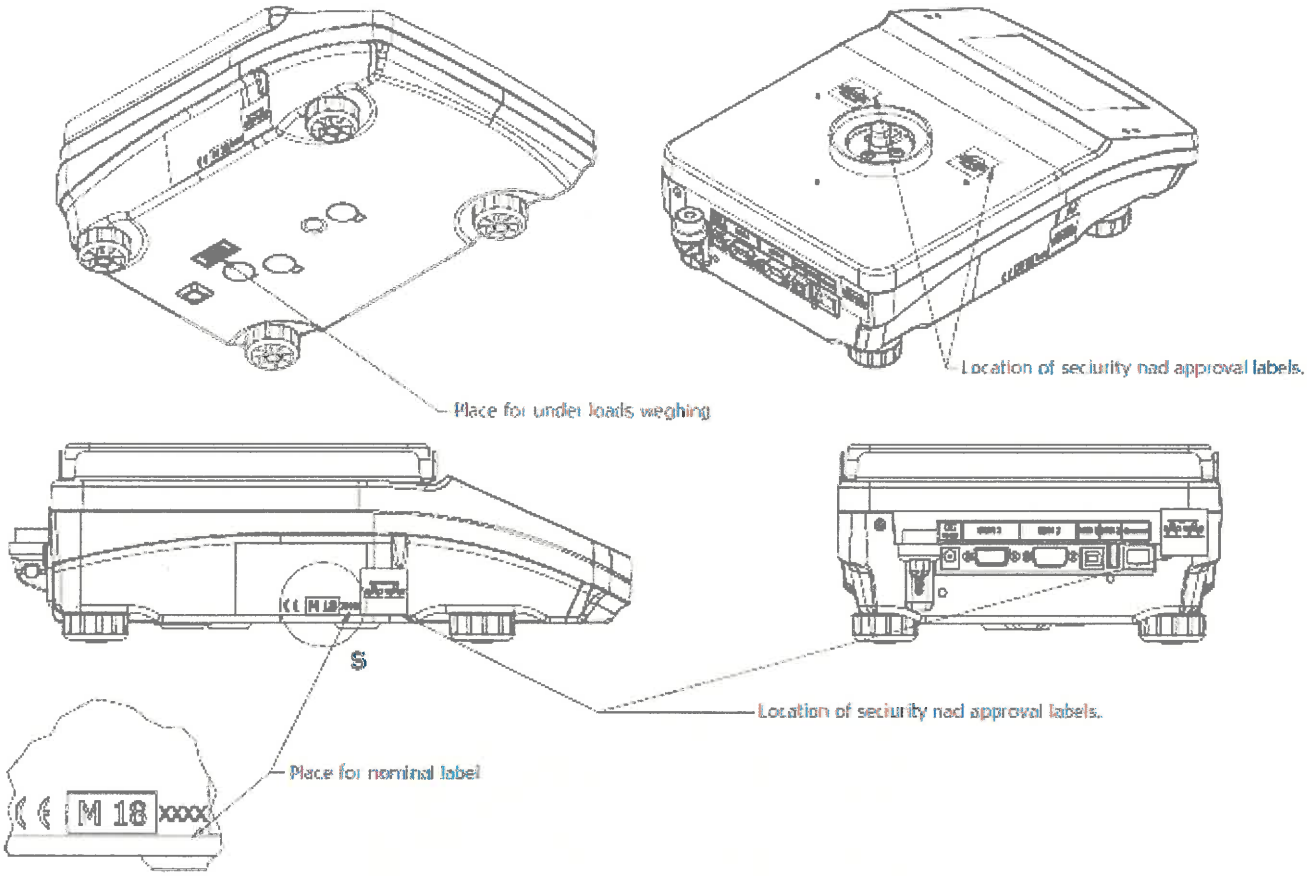
Tests and evaluation carried out are in compliance with EN 45501:2015. Tests are described in the Test Report No. 6052-PT-CH002-20.

Drawing 1 - Side view:

Drawing 2 - Main label position and sealing schemes:






Location of seciurity nad approval labels.
Place for under loads weghing
S
Location of seciurity nad approval labels.
Place for nominal label
M 18 xxxx

Drawing 3 – Overlays with display

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Number: TCM 128/15 - 5326

Addition 3

This addition replaces all previous versions of this certificate in full wording.

In accordance: with Directive 2014/31/EU of the European Parliament and of the Council on the harmonisation of the laws of the Member States relating to the making available on the market of non-automatic weighing instruments (implemented in Czech Republic by Government Order No. 121/2016 Coll.).

Manufacturer: RADWAG WAGI ELEKTRONICZNE Witold Lewandowski
Toruńska 5
26-600 Radom
Poland

For: non-automatic weighing instrument, single or multi range

type PS xxx.X2.yyy	PS xxx.X2.M.yyy or MS xxx.X2.yyy
Accuracy class: II	
Max ≤ 10 000 g	Max ≤ 8 100 g
e ≥ 10 mg , 0,1e ≤ d ≤ e	e ≥ 100 mg , 0,1e ≤ d ≤ e
n ≤ 100 000e	n ≤ 81 000e
Temperature range + 10°C / + 40°C	

Valid until: 20 September 2025

Document No: 0511-CS-A033-15

Description: Essential characteristics, approved conditions and special conditions, if any, are described in this certificate.

Date of issue: 2 July 2018

Certificate approved by:

Český metrologický institut -3-

RNDr. Pavel Klenovský

1. Characteristic of the weighing instrument

Instrument PS xxx.X2.yyy model series operates on basis of electromagnetic compensation of weighed load. Instrument of two equivalent names PS xxx.X2.M.yyy or MS xxx.X2.yyy model series operates on the basis of monolithic mechanism that feature a measuring range up to 8100g. High resolution, repeatability and measuring range of the PS xxx.X2.yyy series is maintained by highly stable electronic and mechanical components, as well as application of automatic internal adjustment system. Balance has full graphic display, plastic cover, stainless steel plate, automatic internal adjustment system. Symbol xxx means Max (g) and symbol yyy means special purpose of balance. Symbol xxx stands for Max (g) and symbol yyy stands for special purpose of balance e.g. jewelry balance – CT.

Description of the instrument:

Description	**Drawing number**
Schedule of balance working	PS.X2-10-1000, sheet 1/3, sheet 2/3, sheet 3/3 PS.X2-10-6000, sheet 1/3, sheet 2/3, sheet 3/3
Side view	Drawing 1
Localization of nominal label and data plate	Drawing 2 (PS.X2-10-1010) Drawing 2 (PS.X2-10-6010)
Display	Drawing 3
Views of the balance and with open case	PS.RX-10-10100 sheet 1/3 to 3/3
Location of sealing and main label	PS.X2-10-10110

2. Main metrological characteristic

Type	**PS 200/2000.X2**	**PS 250.X2**	**PS 1000.X2**	**PS 1500.X2**	**PS 6000.X2**
Maximum - Max	200/2000 g	250 g	1000 g	1500 g	6000 g
Minimum - Min	20/500 mg	20 mg		500 mg	
Resolution – d	1/10 mg	1 mg		10 mg	
Verification interval – e	10/100 mg	10 mg		100 mg	
Tare range – T	-200/-2000 g	-250 g	-1000 g	-1500 g	-6000 g
Working temperature	+10 °C / +40 °C				
Supply	100 V – 240 VAC, 50-60 Hz / 12 – 16 VDC				
Accuracy class	(II)				

Type	**PS 1200.X2.M** **MS 1200.X2**	**PS 2100.X2.M** **MS 2100.X2**	**PS 4500.X2.M** **MS 4500.X2**	**PS 6000.X2.M** **MS 6000.X2.M**	**PS 8100.X2.M** **MS 8100.X2.M**
Maximum - Max	1200 g	2100 g	4500 g	6000 g	8100 g
Minimum - Min	500 mg				
Resolution – d	10 mg				
Verification interval – e	100 mg				
Tare range – T	-1200 g	-2100 g	-4500 g	-6000 g	-8100 g
Working temperature	+10 °C / +40 °C				
Supply	100 V – 240 VAC, 50-60 Hz / 12 – 16 VDC				
Accuracy class	(II)				

The above tables contain some examples of models within the approved range.

Český metrologický institut

3. Essential characteristics and devices

The instruments must be equipped with a level indicator with a sensitivity of at least 2 mm for a tilt of 2/1000.
Devices:

- Zero indicator
- Stability indicator
- Automatic span adjustment with internal calibration mass
- Checking the display
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- Zero-tracking
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3.1 Data Storage Device (Alibi memory)

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- Measurement time
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4. Interfaces

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4.1 Software

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The valid software version is: 2.2.0 and 2.2.1.

5. Non-essential devices

When non-essential device is connected to an electronic instrument through an appropriate interface the metrological qualities of the instrument shall not be adversely influenced.

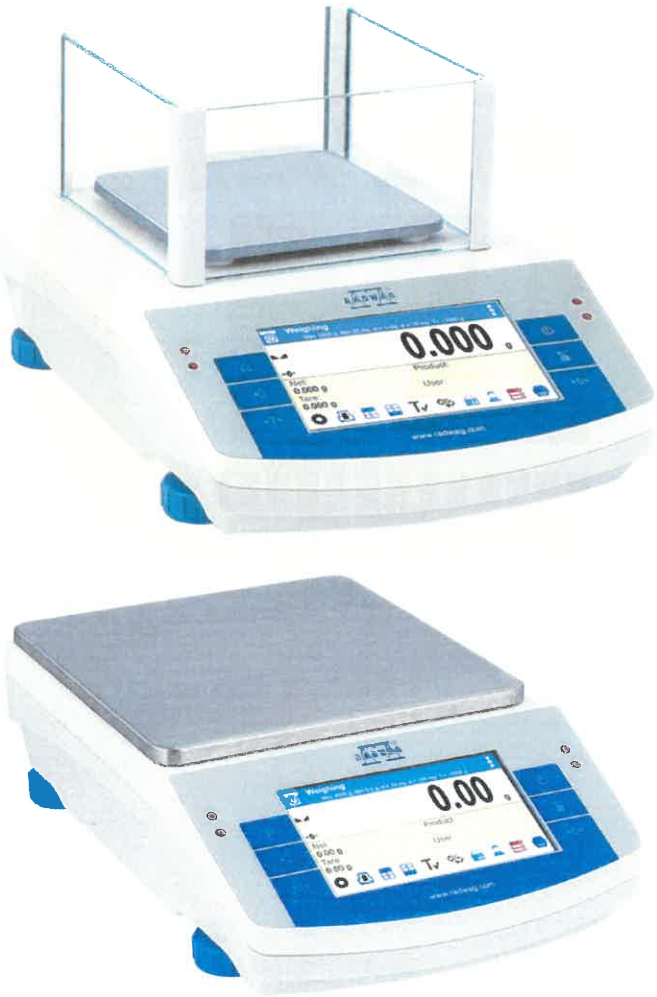
6. Securing components and verification marks
To secure components that may not be dismantled or adjusted by the user, the non-automatic weighing instrument has to be secured in a suitable manner on the locations indicated in the relevant drawings.

7. CE-mark of conformity and inscription
The marks, facilities for the marks and the inscriptions on the non-automatic weighing instruments must fulfill the requirements of the Directive 2014/31/EU.

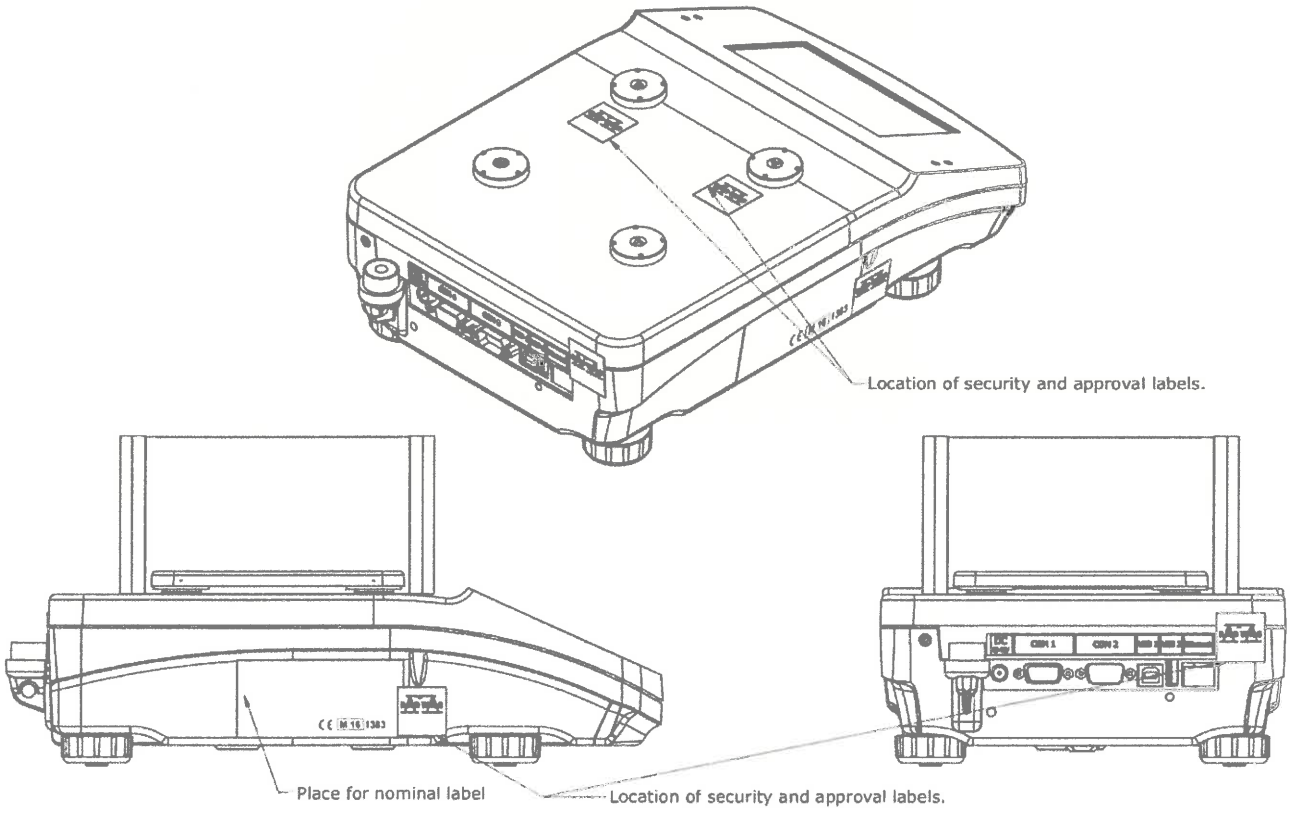
The markings: Max..., Min..., e..., d... if d ≠ e shall also be shown near the display of the result if they are not already located there.

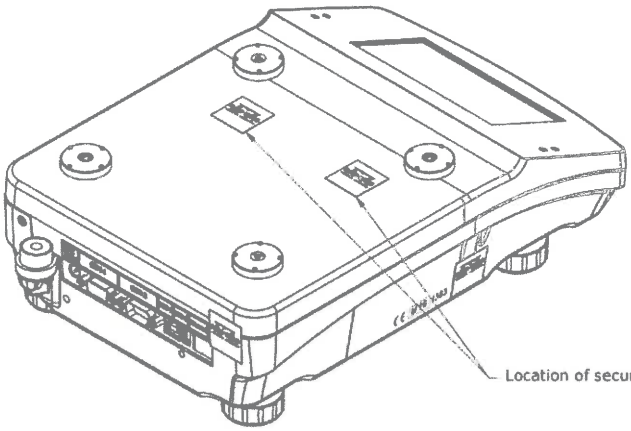
8. Test carried out
Tests and evaluation carried out are in compliance with EN 45501:2015. Tests are described in the Test Report No. 6012-PT-CH011-18.

Drawing 1 - Side view:

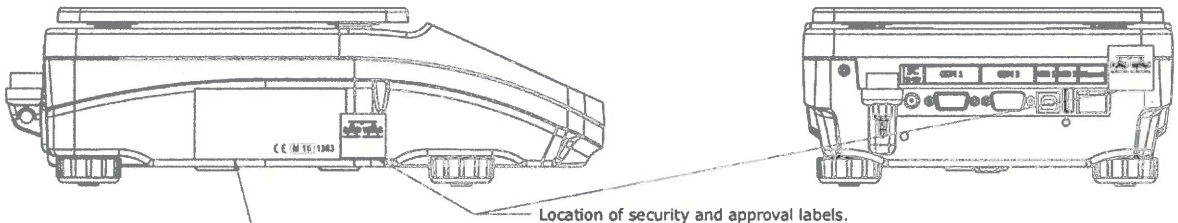


Drawing 2 - Main label position and sealing schemes:



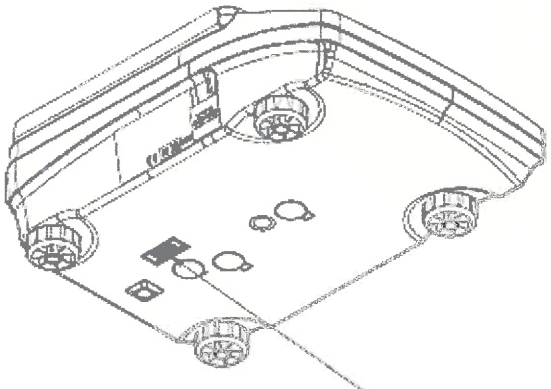


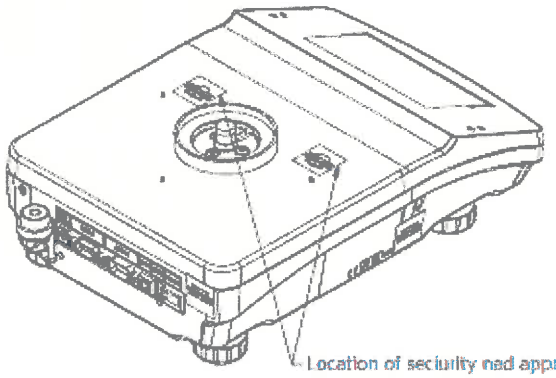
Location of security and approval labels.



Location of security and approval labels.

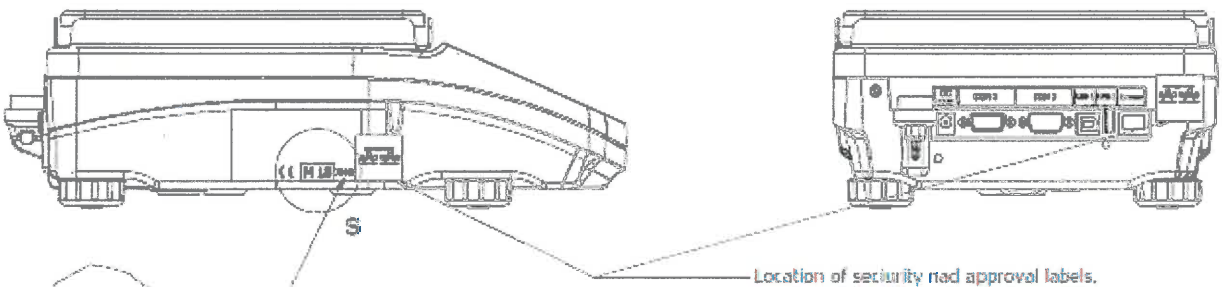
Place for nominal label





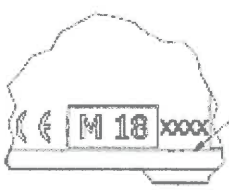
Location of security and approval labels.

Place for under loads weighing



S

Location of security and approval labels.



Place for nominal label

Český metrologický institut

Drawing 3 – Overlays with display

Czech Metrology Institute
Notified Body No. 1383
Okružní 31, 638 00 Brno, Czech Republic
tel. +420 545 555 111, fax +420 545 222 728
www.cmi.cz

V 3112

EU-TYPE EXAMINATION CERTIFICATE

Number: TCM 128/15 - 5326

Addition 2

This addition replaces all previous versions of this certificate in full wording.

In accordance: with Directive 2014/31/EU of the European Parliament and of the Council on the harmonisation of the laws of the Member States relating to the making available on the market of non-automatic weighing instruments (implemented in Czech Republic by Government Order No. 121/2016 Coll.).

Manufacturer: RADWAG WAGI ELEKTRONICZNE Witold Lewandowski
Bracka 28
26-600 Radom
Poland

For: non-automatic weighing instrument, single or multi range

type PS xxx.X2.yyy

Accuracy class: II

Max ≤ 6000 g

e ≥ 10 mg , 0,1e ≤ d ≤ e

n ≤ 100 000e

Temperature range + 10°C / + 40°C

Valid until: 20 September 2025

Document No: 0511-CS-A033-15

Description: Essential characteristics, approved conditions and special conditions, if any, are described in this certificate.

Date of issue: 27 October 2017

Certificate approved by:

Český metrologický institut

RNDr. Pavel Klenovský

1. Characteristic of the weighing instrument

Instrument PS xxx.X2.yyy model series operates on basis of electromagnetic compensation of weighed load. This series features a measuring range up to 6000 g. High resolution, repeatability and measuring range of the PS xxx.X2.yyy series is maintained by highly stable electronic and mechanical components, as well as application of automatic internal adjustment system. Balance has full graphic display, plastic cover, stainless steel plate, automatic internal adjustment system. The type designation is PS xxx.X2.yyy. Symbol xxx means Max (g) and symbol yyy means special purpose of balance. Symbol xxx stands for Max (g) and symbol yyy stands for special purpose of balance e.g. jewelry balance – CT.

Description of the instrument:

Description	**Drawing number**
Schedule of balance working	PS.X2-10-1000, sheet 1/3, sheet 2/3, sheet 3/3 PS.X2-10-6000, sheet 1/3, sheet 2/3, sheet 3/3
Side view	Drawing 1
Localization of nominal label and data plate	Drawing 2 (PS.X2-10-1010) Drawing 2 (PS.X2-10-6010)
Display	Drawing 3

2. Main metrological characteristic

Type	**PS 200/2000.X2**	**PS 250.X2**	**PS 1000.X2**	**PS 1500.X2**	**PS 6000.X2**
Maximum capacity	200/2000 g	250 g	1000 g	1500 g	6000 g
Minimum capacity	20/500 mg	20 mg		500 mg	
Resolution (d)	1/10 mg	1 mg		10 mg	
Verification interval (e)	10/100 mg	10 mg		100 mg	
Tare range (T)	- 200 / - 2000 g	- 250 g	- 1000 g	- 1500 g	- 6000 g
Working temperature	+10 °C / +40 °C				
Supply	100 V – 240 VAC, 50-60 Hz / 12 – 16 VDC				
Accuracy class	II				

The above table is an example of some models within the approved range.

3. Essential characteristics and devices

The instruments must be equipped with a level indicator with a sensitivity of at least 2 mm for a tilt of 2/1000.
Devices:

- Zero indicator
- Stability indicator
- Automatic span adjustment with internal calibration mass
- Checking the display
- Initial zero-setting
- Zero-tracking
- Data Storage Device (Alibi Memory)
- Service menu via switch on the main board
- Printer
- Add display
- USB
- Ethernet
- Weighing in carat units*)

*) For instruments that are able to display in both units if the Max, Min and e values are on a label then they must be marked on the instrument in both units. If the values are shown on a display, then they can be switched

3.1 Data Storage Device (Alibi memory)

Models of PS xxx.X2.yyy balances are equipped with a Data Storage Device (Alibi memory) acting as a long term memory. It automatically saves weighing results according to principles of WELMEC 2.5 in the internal flash memory. A program operates as a simple embedded software without any operating system which prevents from running any external application. The program allows to upload the content of the alibi memory to an external flash drive for archival purposes. The program does not allow to download the alibi memory content to the balance. Each measurement is identified by the following data:

- Measurement date
- Measurement time
- Measurement value (mass)
- Tare value
- Operator (if logged on)
- Product (if chosen)

The memory size allows to save 500 000 weighing results. After the full capacity is reached the single records of the oldest data are overwritten by new data. Single records and the whole database are protected by checksums. Any corruption of data prevents them from viewing or printing.

4. Interfaces

Interfaces used must comply with the paragraph 8.4 of the Annex 1 of the EC Directive 2014/31/EU and 5.3.6 of EN 45501:2015. Following interface is used: RS 232, USB 2.0, Ethernet 10/100Mbit. Optionally the balances may be equipped in wireless interfaces WiFi

4.1 Software

Instruments are equipped with embedded software that is used in a fixed hardware and software environment and cannot be modified or uploaded via any interface or by other means after securing and/or verification. Software identification by its version number is accessible after pressing ON/OFF key on the overlay.
The valid software version is: 2.2.0 and 2.2.1

5. Non-essential devices

When non-essential device is connected to an electronic instrument through an appropriate interface the metrological qualities of the instrument shall not be adversely influenced.

6. Securing components and verification marks

To secure components that may not be dismantled or adjusted by the user, the non-automatic weighing instrument has to be secured in a suitable manner on the locations indicated in the relevant drawings.

7. CE-mark of conformity and inscription

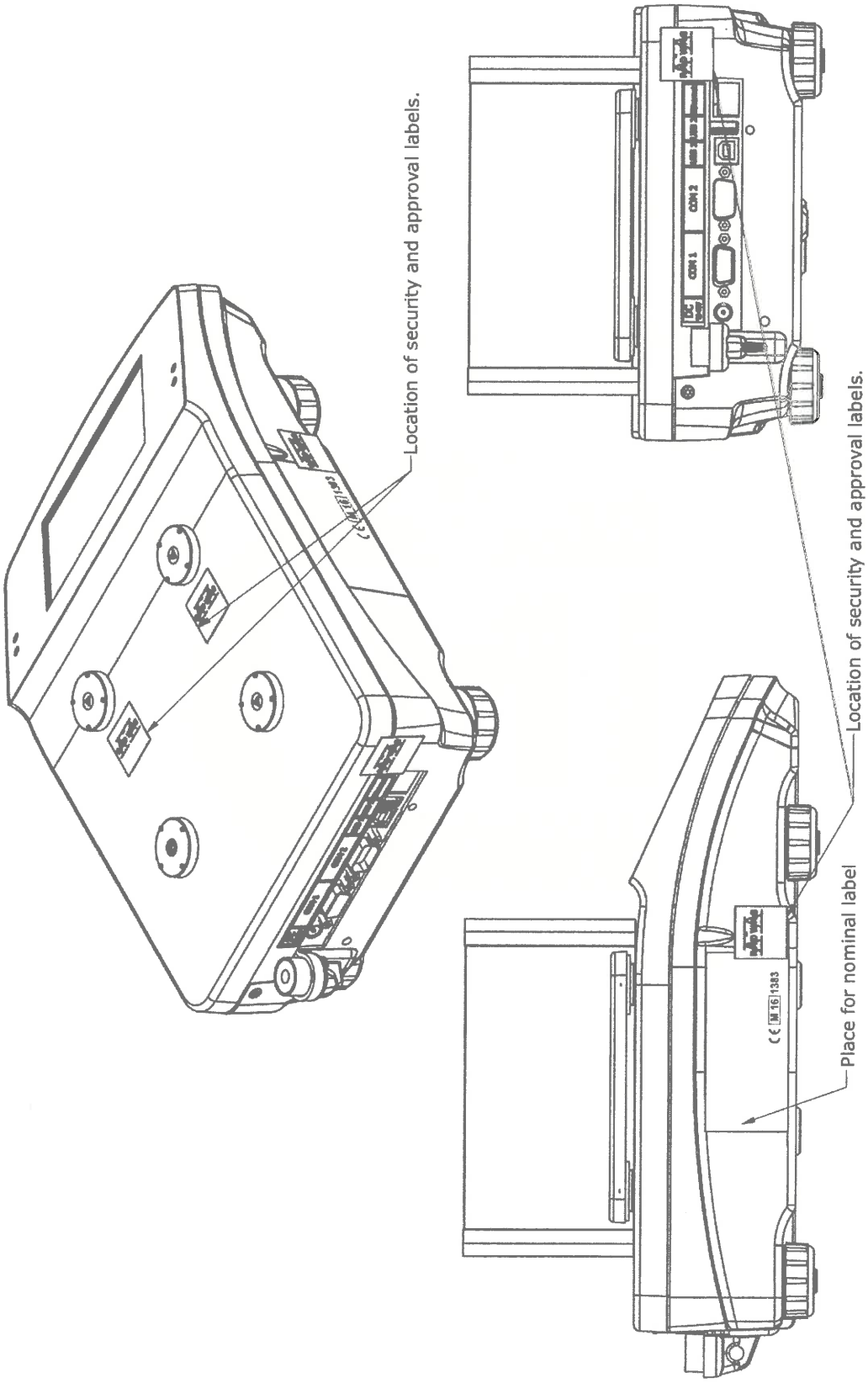
The marks, facilities for the marks and the inscriptions on the non-automatic weighing instruments must fulfill the requirements of the Directive 2014/31/EU. The markings: Max…, Min..., e…., d…., if d≠e shall also be shown near the display of result if they are not already located there.

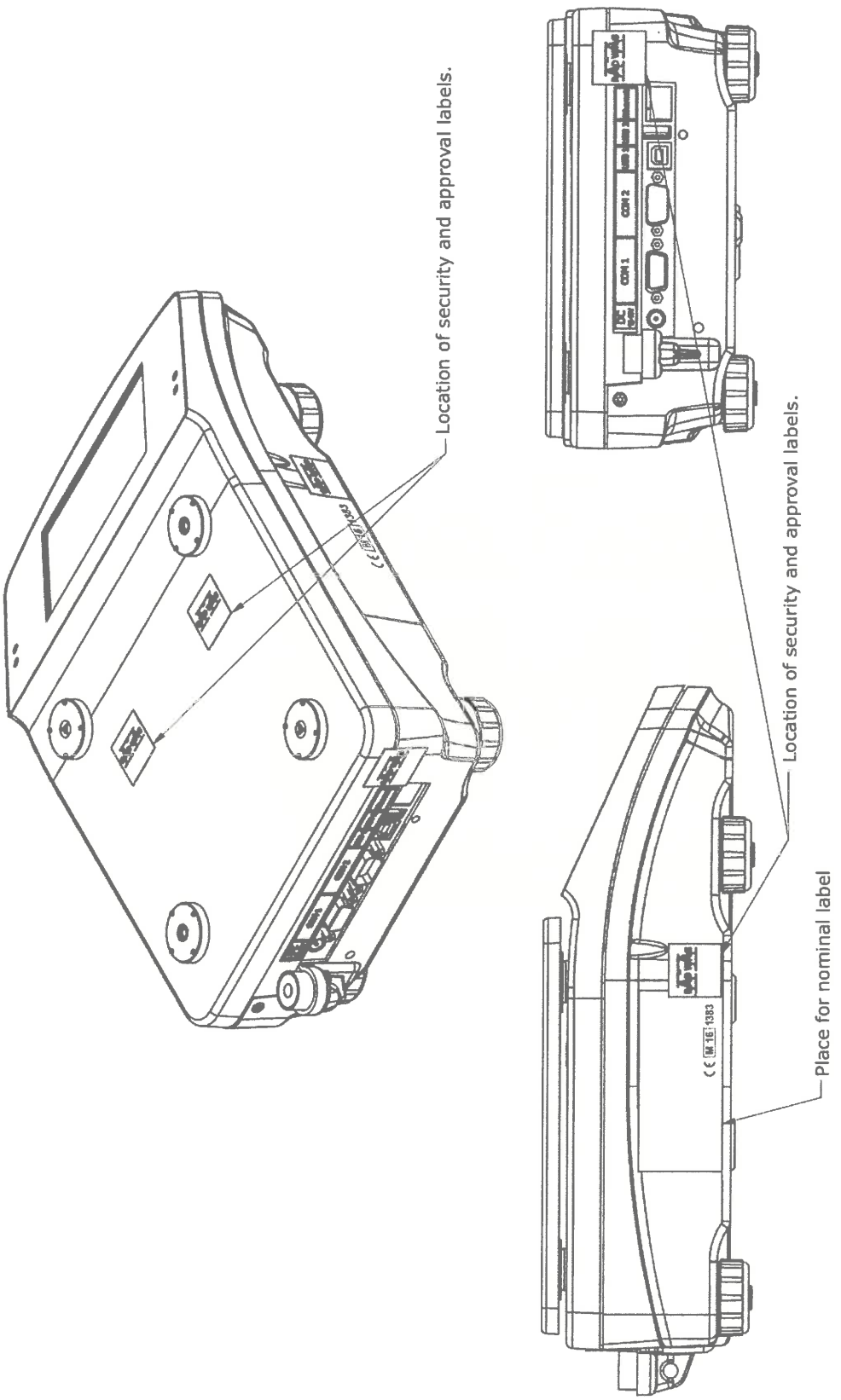
8. Test carried out

Tests and evaluation carried out are in compliance with EN 45501:2015. Tests are described in Test Report No. 6012-PT-CH021-17.

Drawing 1 - Side view:

Drawing 2 - Main label position and sealing scheme:




Location of security and approval labels.
Location of security and approval labels.
Place for nominal label

Drawing 3 – Overlay with display

Czech Metrology Institute
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V 3112

EU-TYPE EXAMINATION CERTIFICATE

Number: TCM 128/15 - 5326

Addition 1

This addition replaces all previous versions of this certificate in full wording.

In accordance: with Directive 2014/31/EU of the European Parliament and of the Council on the harmonisation of the Member States relating to the making available on the market of non-automatic weighing instruments (implemented in Czech Republic by Government Order No. 121/2016 Coll.).

Manufacturer: RADWAG WAGI ELEKTRONICZNE Witold Lewandowski
Bracka 28
26-600 Radom
Poland

For: non-automatic weighing instrument, single or multi range

type PS xxx.X2.yyy

Accuracy class: II

Max ≤ 6000 g

e ≥ 10 mg , 0,1e ≤ d ≤ e

n ≤ 100 000e

Temperature range + 10°C / + 40°C

Valid until: 20 September 2025

Document No: 0511-CS-A033-15

Description: Essential characteristics, approved conditions and special conditions, if any, are described in this certificate.

Date of issue: 29 June 2016

Český metrologický institut
-3-

Certificate approved by:

RNDr. Pavel Klenovský

1. Characteristic of the weighing instrument

Instrument PS xxx.X2.yyy model series operates on basis of electromagnetic compensation of weighed load. This series features a measuring range up to 6000 g. High resolution, repeatability and measuring range of the PS xxx.X2.yyy series is maintained by highly stable electronic and mechanical components, as well as application of automatic internal adjustment system. Balance has full graphic display, plastic cover, stainless steel plate, automatic internal adjustment system. The type designation is PS xxx.X2.yyy. Symbol xxx means Max (g) and symbol yyy means special purpose of balance. Symbol xxx stands for Max (g) and symbol yyy stands for special purpose of balance e.g. jewelry balance – CT.

Description of the instrument:

Description	**Drawing number**
Schedule of balance working	PS.X2-10-1000, sheet 1/3, sheet 2/3, sheet 3/3 PS.X2-10-6000, sheet 1/3, sheet 2/3, sheet 3/3
Side view	Drawing 1
Localization of nominal label and data plate	Drawing 2 (PS.X2-10-1010) Drawing 2 (PS.X2-10-6010)
Display	Drawing 3

2. Main metrological characteristic

Type	**PS 200/2000.X2**	**PS 250.X2**	**PS 1000.X2**	**PS 1500.X2**	**PS 6000.X2**
Maximum capacity	200/2000 g	250 g	1000 g	1500 g	6000 g
Minimum capacity	20/500 mg	20 mg		500 mg	
Resolution (d)	1/10 mg	1 mg		10 mg	
Verification interval (e)	10/100 mg	10 mg		100 mg	
Tare range (T)	- 200 / - 2000 g	- 250 g	- 1000 g	- 1500 g	- 6000 g
Working temperature	+10 °C / +40 °C				
Supply	100 V – 240 VAC, 50-60 Hz / 12 – 16 VDC				
Accuracy class	II				

The above table is an example of some models within the approved range.

3. Essential characteristics and devices

The instruments must be equipped with a level indicator with a sensitivity of at least 2 mm for a tilt of 2/1000. Devices:

- Zero indicator
- Stability indicator
- Automatic span adjustment with internal calibration mass
- Checking the display
- Initial zero-setting
- Zero-tracking
- Data Storage Device (Alibi Memory)
- Service menu via switch on the main board
- Printer
- Add display
- USB
- Ethernet
- Weighing in carat units*)

*) For instruments that are able to display in both units if the Max, Min and e values are on a label then they must be marked on the instrument in both units. If the values are shown on a display, then they can be switched.

3.1 Data Storage Device (Alibi memory)

Models of PS xxx.X2.yyy balances are equipped with a Data Storage Device (Alibi memory) acting as a long term memory. It automatically saves weighing results according to principles of WELMEC 2.5 in the internal flash memory. A program operates as a simple embedded software without any operating system which prevents from running any external application. The program allows to upload the content of the alibi memory to an external flash drive for archival purposes. The program does not allow to download the alibi memory content to the balance. Each measurement is identified by the following data:

- Measurement date
- Measurement time
- Measurement value (mass)
- Tare value
- Operator (if logged on)
- Product (if chosen)

The memory size allows to save 500 000 weighing results. After the full capacity is reached the single records of the oldest data are overwritten by new data. Single records and the whole database are protected by checksums. Any corruption of data prevents them from viewing or printing.

4. Interfaces

Interfaces used must comply with the paragraph 8.4 of the Annex 1 of the EC Directive 2014/31/EU and 5.3.6 of EN 45501:2015. Following interface is used: RS 232, USB 2.0, Ethernet 10/100Mbit. Optionally the balances may be equipped in wireless interfaces WiFi

4.1 Software

Instruments are equipped with embedded software that is used in a fixed hardware and software environment and cannot be modified or uploaded via any interface or by other means after securing and/or verification. Software identification by its version number is accessible after pressing ON/OFF key on the overlay.
The valid software version is: 2.2.0

5. Non-essential devices

When non-essential device is connected to an electronic instrument through an appropriate interface the metrological qualities of the instrument shall not be adversely influenced.

6. Securing components and verification marks

To secure components that may not be dismantled or adjusted by the user, the non-automatic weighing instrument has to be secured in a suitable manner on the locations indicated in the relevant drawings.

7. CE-mark of conformity and inscription

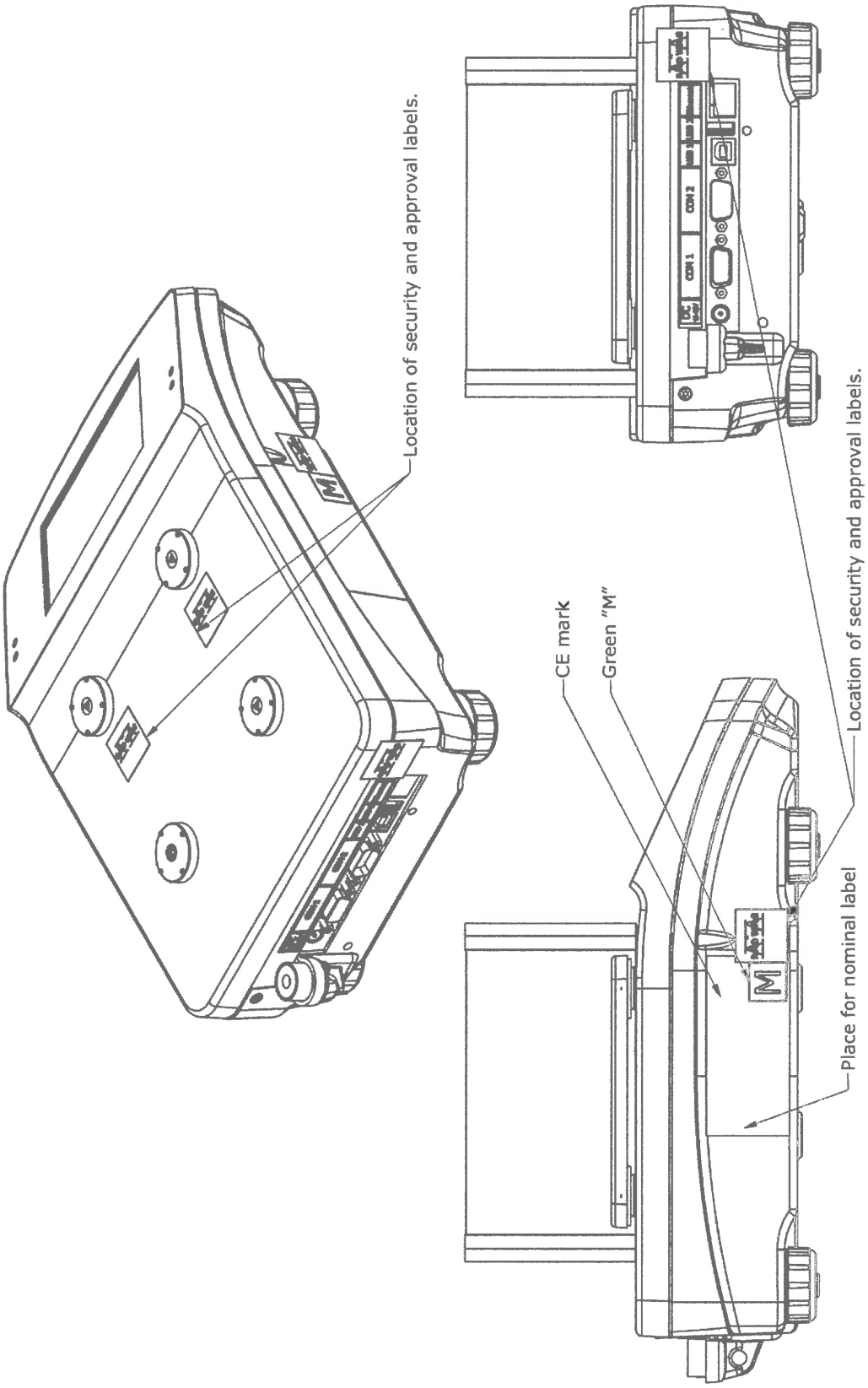
The marks, facilities for the marks and the inscriptions on the non-automatic weighing instruments must fulfill the requirements of the Directive 2014/31/EU. The markings: Max…, Min..., e…., d…., if d≠e shall also be shown near the display of result if they are not already located there.

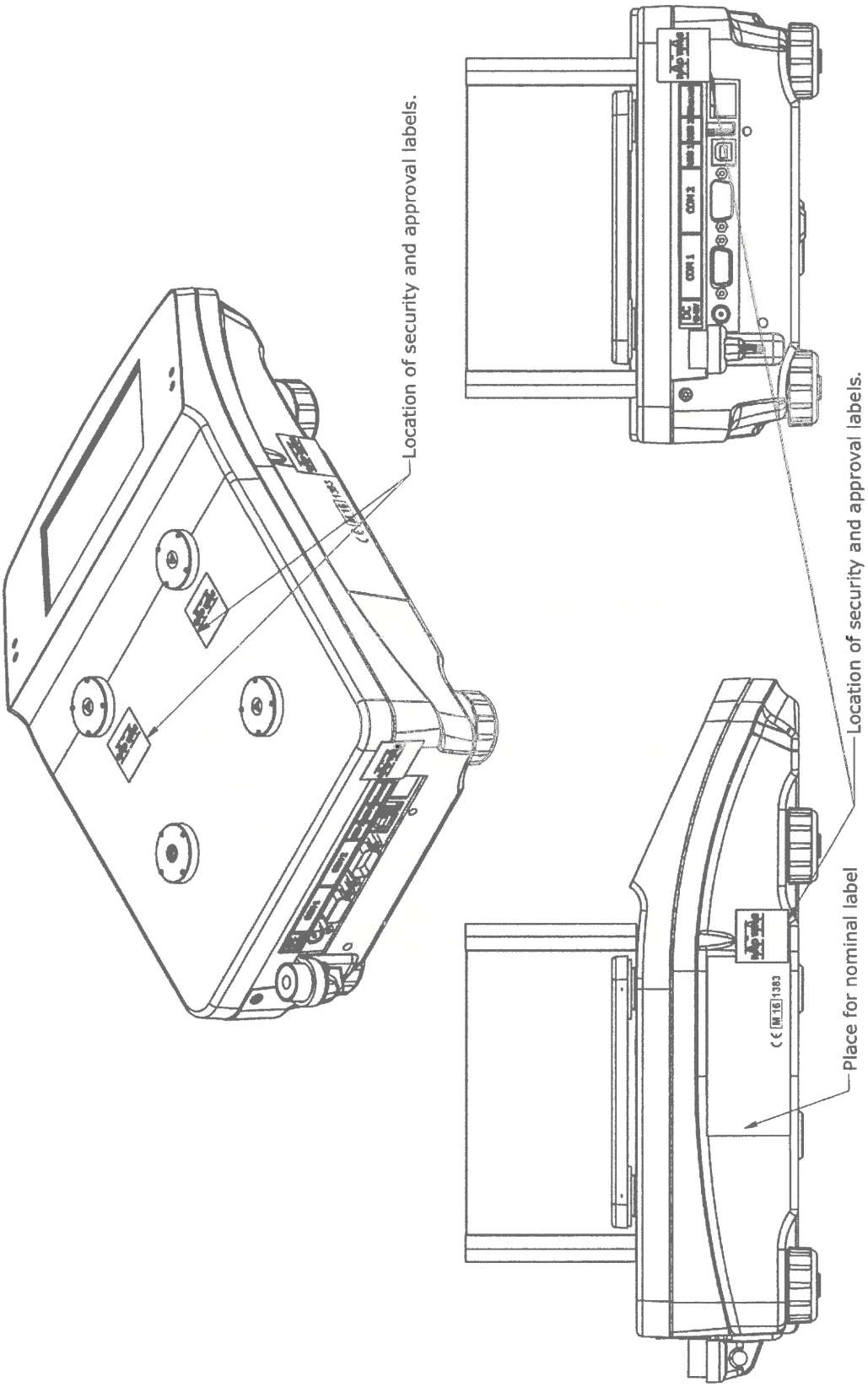
8. Test carried out

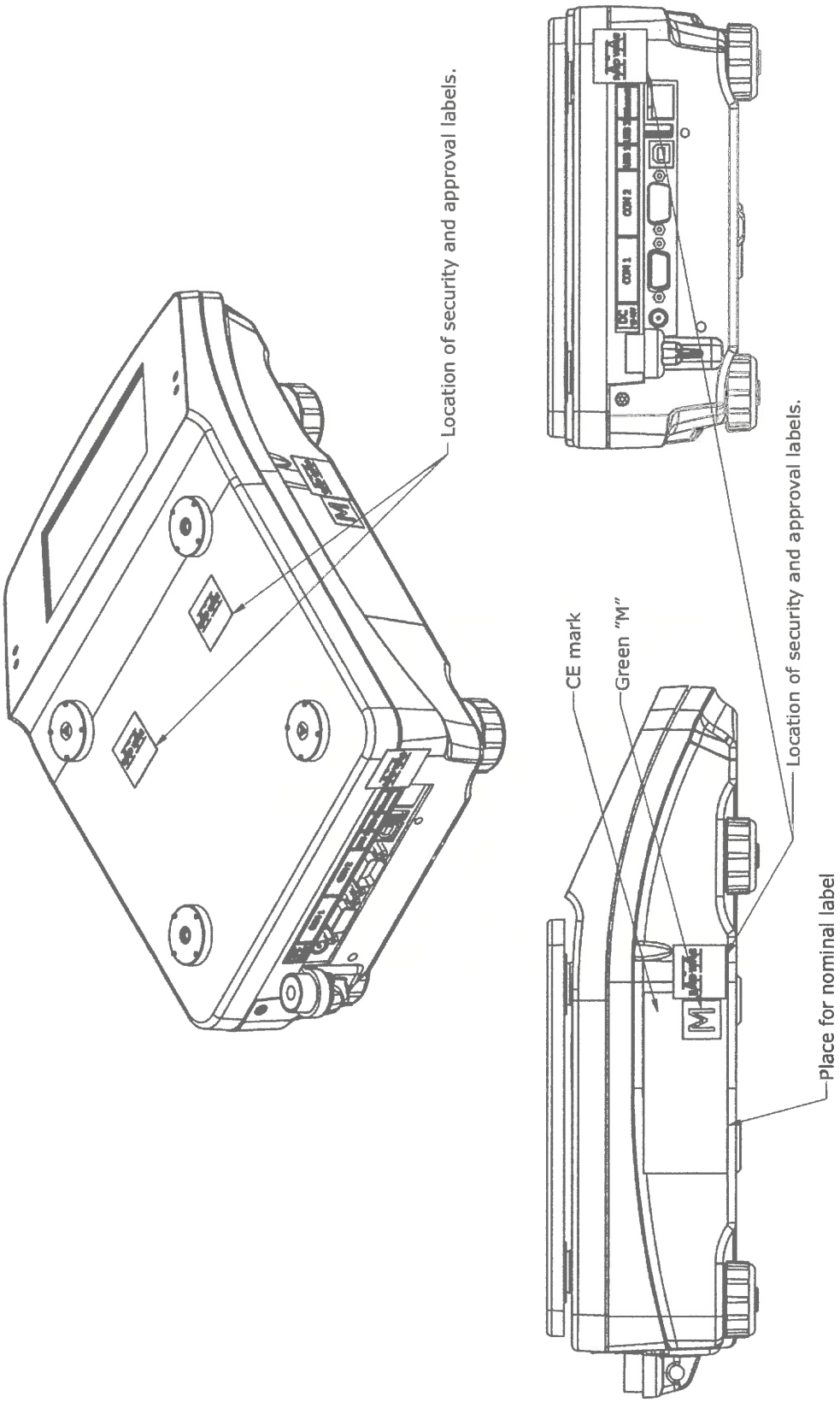
Tests and evaluation carried out are in compliance with EN 45501:2015.

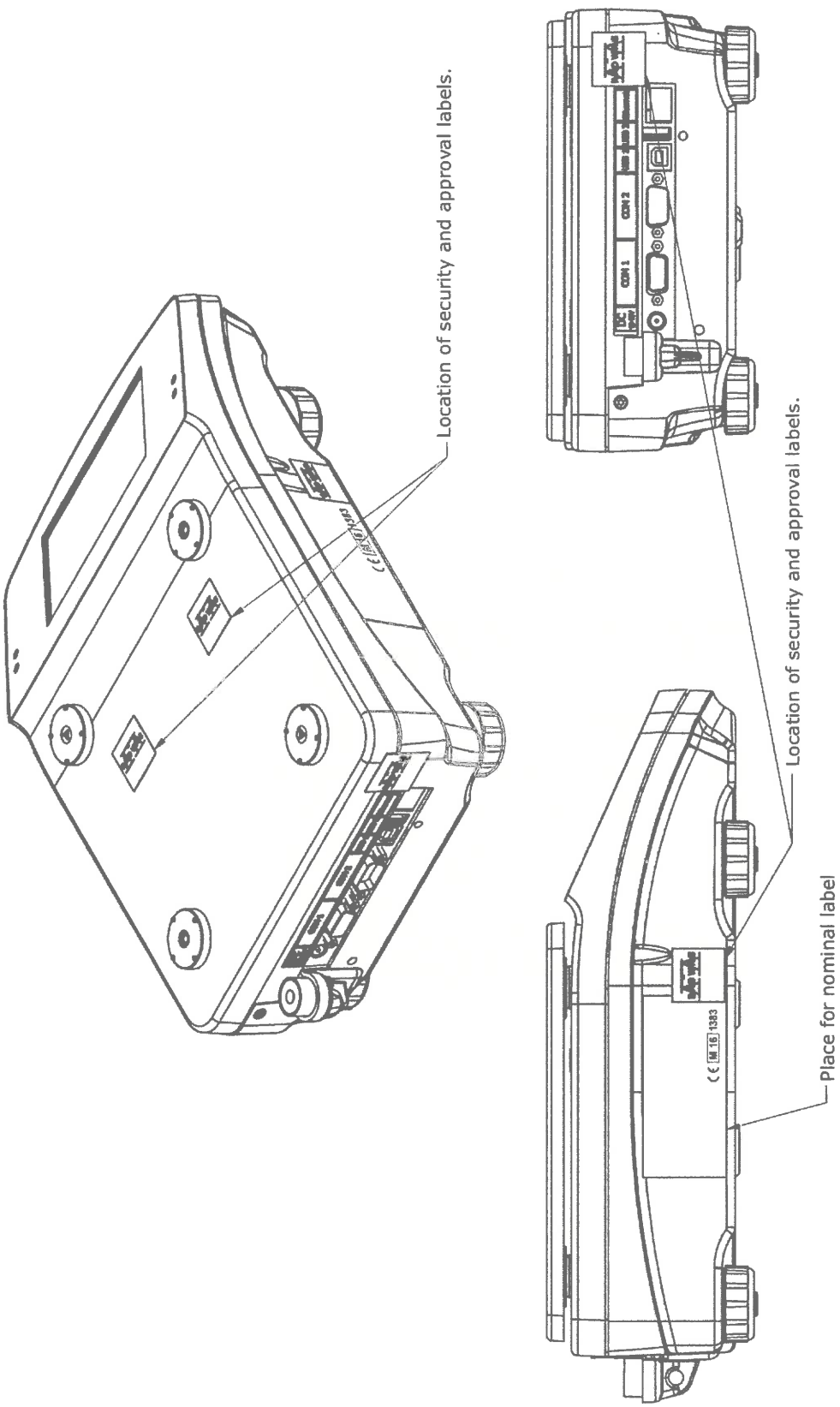
Drawing 1 - Side view:

Drawing 2 - Main label position and sealing scheme:




Location of security and approval labels.
Location of security and approval labels.
Place for nominal label


Location of security and approval labels.
Location of security and approval labels.
CE mark
Green "M"
Place for nominal label


Location of security and approval labels.
Location of security and approval labels.
Place for nominal label

Drawing 3 – Overlay with display

Czech metrological institute
Notified Body No. 1383

Okružní 31, 638 00 Brno, Czech Republic

tel. +420 545 555 111, fax +420 545 222 728
www.cmi.cz

V 3112

EC TYPE-APPROVAL CERTIFICATE

Number: TCM 128/15 – 5326

In accordance: with Directive 2009/23/EC of the European Parliament and of the Council as amended – codified version of Directive 90/384/EEC implemented by Government Order No. 326/2002 Coll. as amended, that lays down technical requirements on non-automatic weighing instruments.

Manufacturer: RADWAG WAGI ELEKTRONICZNE – Witold Lewandowski
Bracka 28
26-600 Radom
Poland

For: non-automatic weighing instrument, single or multi range

Type PS xxx.X2.yyy

Accuracy class (II)

Max ≤ 6000 g

e ≥ 10 mg , 0,1e ≤ d ≤ e

n ≤ 100 000 e

Temperature range + 10°C / + 40°C

Valid until: 20 September 2025

Document No: 0511-CS-A033-15

Description: Essential characteristics, approved conditions and special conditions, if any, are described in this certificate.

Date of issue: 21 September 2015

Certificate approved by:

Český metrologický institut NOTIFIKOVANÁ OSOBA AO 250 1383

V.z.

RNDr. Pavel Klenovský

1. Characteristic of the weighing instrument

Instrument PS xxx.X2.yyy model series operates on basis of electromagnetic compensation of weighed load. This series features a measuring range up to 6000 g. High resolution, repeatability and measuring range of the PS xxx.X2.yyy series is maintained by highly stable electronic and mechanical components, as well as application of automatic internal adjustment system. Balance has full graphic display, plastic cover, stainless steel plate, automatic internal adjustment system. The type designation is PS xxx.X2.yyy. Symbol xxx means Max (g) and symbol yyy means special purpose of balance. Description of the instrument:

Description	**Drawing number**
Schedule of balance working	PS.X2-10-1000, sheet 1/3, sheet 2/3, sheet 3/3 PS.X2-10-6000, sheet 1/3, sheet 2/3, sheet 3/3
Side view	Drawing 1
Localization of nominal label and data plate	Drawing 2 (PS.X2-10-1010) Drawing 2 (PS.X2-10-6010)
Display	Drawing 3

2. Main metrological characteristic

Type	**PS 200/2000.X2**	**PS 250.X2**	**PS 1000.X2**	**PS 1500.X2**	**PS 6000.X2**
Maximum capacity	200/2000 g	250 g	1000 g	1500 g	6000 g
Minimum capacity	20/500 mg	20 mg		500 mg	
Resolution (d)	1/10 mg	1 mg		10 mg	
Verification interval (e)	10/100 mg	10 mg		100 mg	
Tare range (T)	- 200 / - 2000 g	- 250 g	- 1000 g	- 1500 g	- 6000 g
Working temperature	+10 °C / +40 °C				
Supply	100 V – 240 VAC, 50-60 Hz / 12 – 16 VDC				
Accuracy class	(II)				

The above table is an example of some models within the approved range.

3. Essential characteristics and devices

The instruments must be equipped with a level indicator with a sensitivity of at least 2 mm for a tilt of 2/1000. Devices:

- Zero indicator
- Stability indicator
- Automatic span adjustment with internal calibration mass
- Checking the display
- Initial zero-setting
- Zero-tracking
- Data Storage Device (Alibi Memory)
- Service menu via switch on the main board
- Printer
- Add display
- USB
- Ethernet

3.1 Data Storage Device (Alibi memory)

Models of PS xxx.X2.yyy balances are equipped with a Data Storage Device (Alibi memory) acting as a long term memory. It automatically saves weighing results according to principles of WELMEC 2.5 in the internal flash memory. A program operates as a simple embedded software without any operating system which prevents from running any external application. The program allows to upload the content of the alibi memory to an external flash drive for archival purposes. The program does not allow to download the alibi memory content to the balance. Each measurement is identified by the following data:

- Measurement date
- Measurement time
- Measurement value (mass)
- Tare value
- Operator (if logged on)
- Product (if chosen)

The memory size allows to save 500 000 weighing results. After the full capacity is reached the single records of the oldest data are overwritten by new data. Single records and the whole database are protected by checksums. Any corruption of data prevents them from viewing or printing.

4. Interfaces

Interfaces used must comply with the paragraph 8.4 of the Annex 1 of the EC Directive 2009/23/EC and 5.3.6 of EN 45501. Following interface is used: RS 232, USB 2.0, Ethernet 10/100Mbit. Optionally the balances may be equipped in wireless interfaces WiFi

5. Non-essential devices

The non-automatic weighing instruments may be connected to non-essential devices, (for example an additional display), provided that:

- They do not present primary data used for purposes mentioned in the article 1(2)(a) of the EC Directive 2009/23/EC unless the „preliminary observation" in the Annex 1 of this directive is satisfied.
- They do not lead to an instrument having other essential characteristic than those fixed by this type –approval certificate.

6. Securing components and verification marks

To secure components that may not be dismantled or adjusted by the user, the non-automatic weighing instrument has to be secured in a suitable manner on the locations indicated in the relevant drawings.

The securing components have to bear either:

- a mark of the manufacturer laid down in a notified body approved quality system (Annex II of the EC Directive 2009/23/EC)
- an official verification mark used of the relevant notified body

7. CE-mark of conformity and inscription

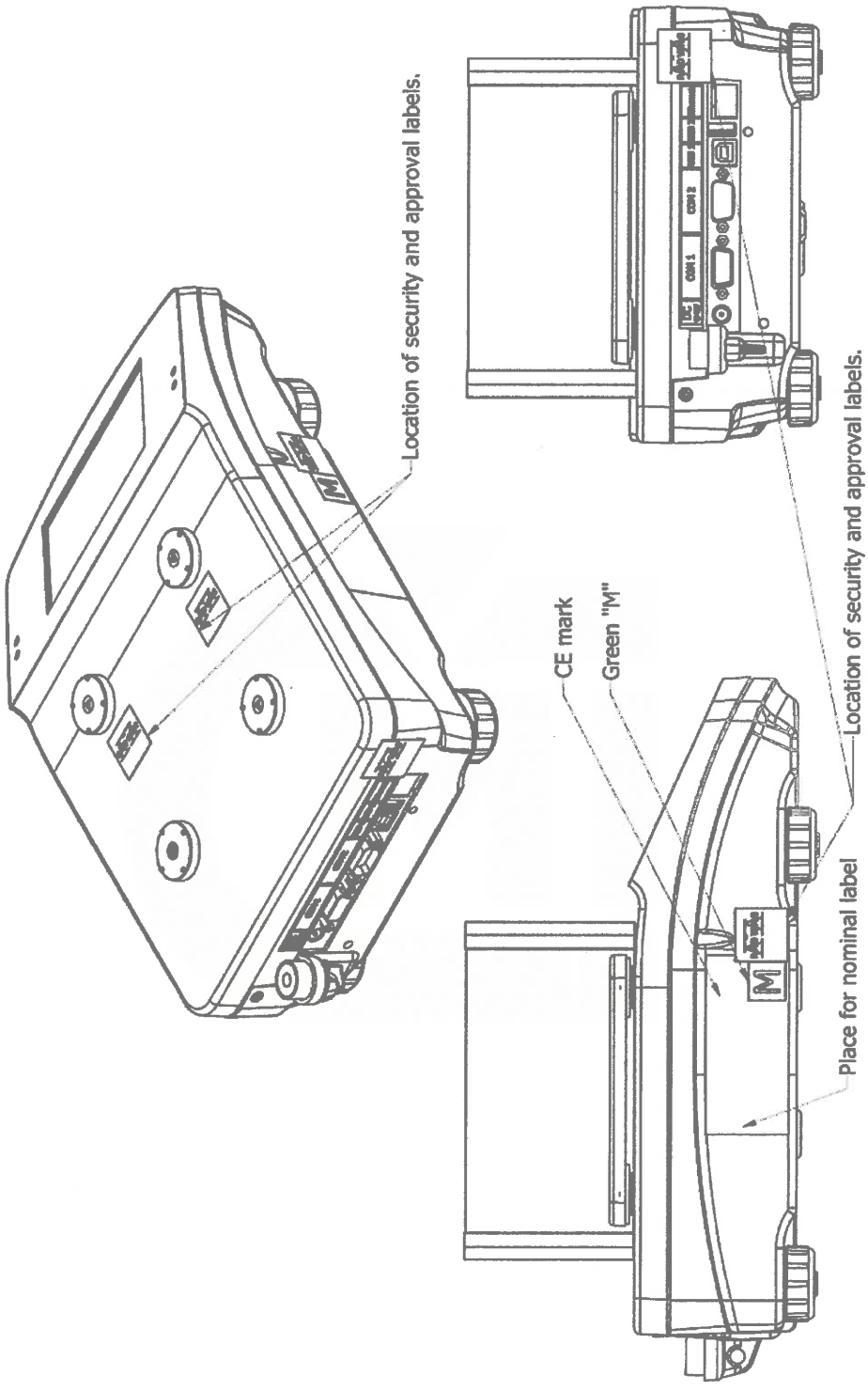
The marks, facilities for the marks and the inscriptions on the non-automatic weighing instruments must fulfill the requirements of the Annex 4 of the EC Directive 2009/23/EC. The markings: Max…, Min..., e…., d…., if d≠e shall also be shown near the display of result if the are not already located there.

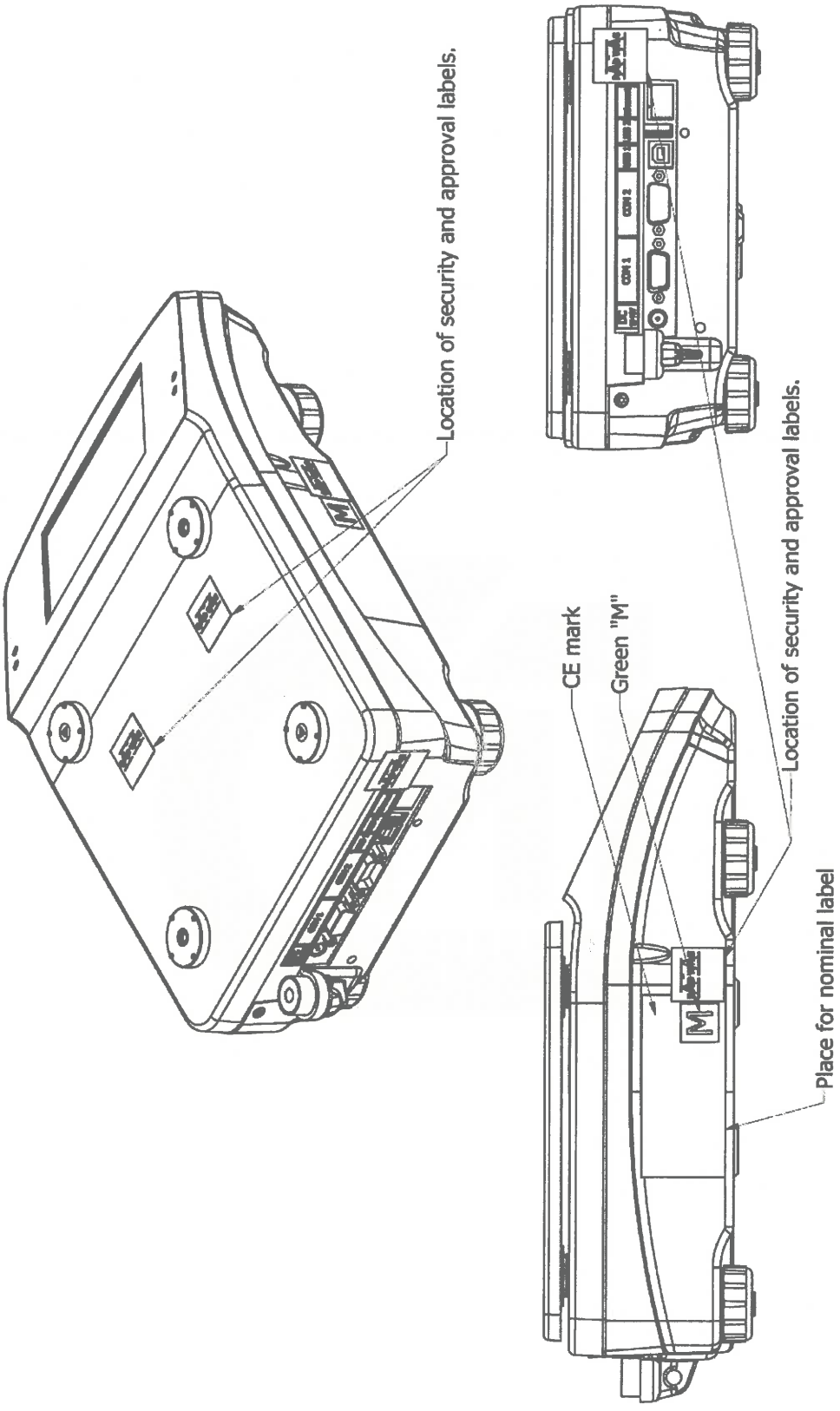
8. Additional EMC tests

The sample under test underwent tests under clauses B 3.1, B.3.3, B.3.5 and B 3.6 according to OIML R 76 Edition 2006 that are not included in EN 45501, including tests on immunity to radiated electromagnetic fields of strength 10 V/m.

Drawing 1 - Side view:

Drawing 2 - Main label position and sealing scheme:




Location of security and approval labels.
CE mark
Green "M"
Location of security and approval labels.
Place for nominal label

Drawing 3 – Overlay with display