





OIML Member State

Czech Republic

OIML Certificate No. R76/2006-A-CZ1-2023.06

OIML CERTIFICATE ISSUED UNDER SCHEME A

OIML Issuing Authority

Name: Czech Metrology Institute

Address: Okružní 31

638 00 Brno Czech Republic

Person responsible: Jan Kalandra

Applicant

Name: RADWAG Wagi Elektroniczne Witold Lewandowski

Address: 5 Toruńska Street

26-600 Radom

Poland

Manufacturer

Name: RADWAG Wagi Elektroniczne Witold Lewandowski

Address: 5 Toruńska Street

26-600 Radom

Poland

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

Indicator for Non-automatic weighing instruments

type: PUE CY10 or 5Y

Designation of the module

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 76-1 Edition (year): 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 reports:

Test report 6052-PT-Z0001-23 that includes 61pages and 8551-PT-E0014-23 that includes 46 pages, OIML type evaluation report No. 0511-ER-N005-23 dated 21 August 2023 that includes 10 pages.

The technical documentation relating to the identified type is contained in documentation file: 0511-UL-N005-23

OIML Certificate History

Revision No.	Date	Description of the modification
-	22 August 2023	Issuing certificate

The OIML Issuing Authority

Ing. František Staněk PhD.

Deputy Head of Certification Body

Date: 22 August 2023



Important note: Apart from the mention of the Certificate's reference number and the name of the OIML MemberState in which the Certificate is issued, partial quotation of the Certificate and of the associated OIML type evaluation report(s) is not permitted, although either may be reproduced in full.

Characteristics of the instrument

Electronic indicator for non-automatic weighing instruments of accuracy class III. Two alternative names are equivalent for this indicator i.e. PUE CY10 or 5Y.

Main metrological characteristics

	PUE CY10 or 5Y
Housing	Metal (bottom) + plastic (top)
Ingres protection	IP 43
Operating temperature	-10°C / +40°C
Display	LCD (graphic with touch panel)
Class	III
Maximum number of verification scale intervals	10000
Multirange	yes
Power supply	100-240VAC 50-60Hz / 12-15 V DC
Optional power supply	External 12-15 VDC
Maximum signal increace	39 mV
Maximum voltage per verification scale interval	3.25μV
Minimum voltage per verification scale interval	0.4µV
Minimum load cell impedance	50Ω
Maximum load cell impedance	1200 Ω
Load cell supply	5V DC
Load cell connections	4 or 6 wires plus shield
Maximum number of connected platforms	1 or 2
Standard interfaces	RS232, 2 x USB type A, 1 x USB type C, Ethernet, HDMI port, Hotspot, wireless connection, RFID

Devices and functions

- multi range
- determination of stability of equilibrium
- indication of stable equilibrium
- zero indicator
- initial zero setting $\leq 20\%$ Max
- zero tracking ≤ 4% Max
- automatic zero setting
- semi-automatic zero setting
- semi-automatic tare balancing (subtractive)
- calibration and set-up mode via switch on the main board
- gravity factor set up

Memory module (Alibi memory)

The PUE CY10 or 5Y indicator can be equipped with a Memory module (Alibi memory) used as a database system acting as a long-term memory realized in a micro SD flash card. It saves automatically weighing results according to WELMEC 2.5 guideline. The record of weighing holds all relevant information required i.e. net and tare values together with units, date and time record as an identifier, platform number as the load receptor designation and some other that are not relevant but useful for other applications.

Protection against unintentional changes with common software tools has been achieved through designing closed shell system with no possibility to start any external programs. The only program that can be run is the one that is saved in the internal flash memory. It is loaded to the RAM memory after powering up the device. Then it is executed. Here the general protection rules, applied by the operating system for files allocation, are applicable. If files are corrupted or there are any other file-reading problems the system generates some exceptions or errors which are handled by software.

Weighings in DSD are identified by date and time which is one of fields in the relevant part of the weighing record. It is saved in the Windows or Linux date format standard that allows to present the date in a format with accuracy that meets Welmec 2.5 requirements and allows to present dates in format yyyy-mm-dd, hh:mm:ss.

Weighings are saved automatically. Measurements are initiated by pressing the print/enter button or by automatic measurement triggering after fulfilling some conditions (e.g. results between MIN and MAX or over LO) depending on the device configuration. Each stored weighing can be printed and/or shown on the main display. The printer is not the part of DSD.

Software

The PUE CY10 or 5Y indicators are equipped with hybrid system with **embedded software version P2.0.0** with all the basic weighing functions and legally relevant parameters. On the level of terminal with display **closed shell software version** is used. Linux operating system is used for terminal operation with **LL2.0** software version. Software works under Linux operating system supervises DSD (alibi memory), printing and displaying functions. The above mentioned legally relevant pieces of software communicate via a protected internal hardware interface (they are realized on separate microprocessors).

It is impossible to download any piece of software when an instrument is verified. Downloading software requires unblocking it in factory parameters and access to them can be reached after destroying verification stickers that constitute evidence of intervention. Previously certified software remains valid for and will be used in older versions of terminal which are not compatible with new software. Software identification is possible after pressing the top bar on the display after the software begins to operate.

Interface

The indicator is equipped with following interfaces: RS232, 2 x USB type A, 1 x USB type C, Ethernet, HDMI port, Hotspot, wireless connection, RFID.

