

# PUE 7.1 Indicator

Numerous working modes

High efficiency of multifunctional weighing instruments based on load cells



PUE 7.1



PUE 7.1P



5.7" touchscreen assuring intuitive operation



Programmable infrared sensors



Communication interfaces

## Functions

- |                |                       |                             |                   |                   |
|----------------|-----------------------|-----------------------------|-------------------|-------------------|
| Parts counting | Statistics            | Density determination       | Labelling         | Smart select      |
| Dosing         | Differential weighing | Peak hold                   | Percent weighing  | Alibi memory      |
| Checkweighing  | Animal weighing       | Pre-packaged goods control  | Proximity sensors | Replaceable units |
| Formulations   | Totalizing            | Statistical quality control | Transactions      | Multilingual menu |

## Features

### Ergonomics and Comfort of Operation

The indicator is equipped with 5.7" colour TFT touchscreen, ensuring perfect readability, and membrane keypad. The device features two proximity sensors placed at the front of the housing, which can be freely configured using the menu. The proximity sensors enable touch free operation making your work even more comfortable, and help to keep the indicator clean.

### Ingress Protection

The standard version of the indicator, PUE 7.1, features plastic housing for which the ingress protection is IP43. The panel version, i.e. PUE 7.1P indicator, is equipped with housing made of stainless steel, rated with IP66/67. The stainless steel model can be installed in a control panel or a switchboard.

### Vast Range of Applications

Indicator software offers numerous working modes designed to perform various weighing processes such as parts counting, dosing, formulations, transactions or determination of density of solids. The

indicator can be an integral part of many scales and weighing systems operating in various branches of industry.

### Communication Interfaces

PUE 7.1 and PUE 7.1P indicators are equipped with RS232, USB-A and Ethernet interfaces and with 4 digital inputs and outputs. This facilitates both cooperation of the indicator with peripheral devices and data exchange using USB drives. The PUE 7.1 comprises Wi-Fi® allowing the indicator to connect with wireless networks.

### High Efficiency

The indicator features 1,2 GHz quad-core processor, 1 GB RAM and Linux. With this high efficiency operation is guaranteed.

## Technical Specifications

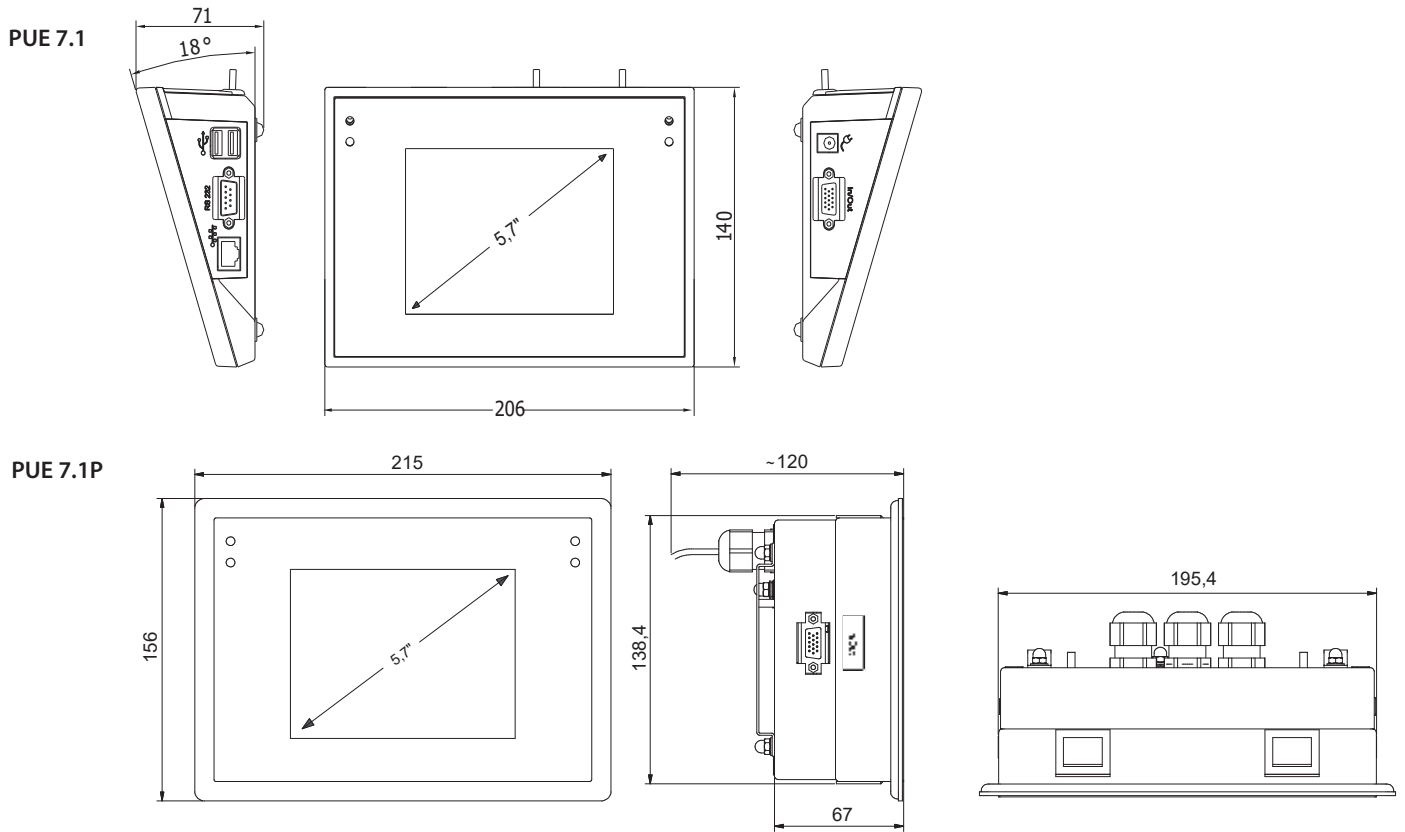
	PUE 7.1	PUE 7.1P
Maximum quantity of verification units [e]	6000	–
OIML class	III	–
Maximum signal gain	19.5 mV	19.5 mV
Maximum voltage per verification unit	3.25 µV	–
Minimum voltage per verification unit	0.4 µV	–
Minimum load cells impedance	50 Ω	50 Ω
Maximum load cells impedance	1200 Ω	1200 Ω
Supply voltage of load cell	5V DC	5V DC
Load cells wiring	4 or 6 wires + shield	4 or 6 wires + shield
Module of an additional A/D DP4 converter*	1	1
Maximum quantity of connected platforms	Max. 2	Max. 2
Multi range	YES	YES
Housing	ABS plastic	ABS plastic
Ingress protection	IP 43	Panel version - IP 66/67 Standard version - IP 32
Display	colour TFT (640 × 480) 5.7" with touchscreen	colour TFT (640 × 480) 5.7" with touchscreen
Keypad	touchscreen+ function keys	touchscreen+ function keys
Keys quantity	8	8
Touch-free operation	2 programmable proximity sensors	2 programmable proximity sensors
Processor	quad-core 64-bit Cortex-A53 1,2 GHz	quad-core 64-bit Cortex-A53 1,2 GHz
RAM	RAM 1GB LPDDR2	RAM 1GB LPDDR2
Memory	16 GB (micro SD)	16 GB (micro SD)
System	Linux	Linux
USB-A	2	2
RS 232	1 × connector 8-pin, 1 × connector 15-pin	1 × connector 8-pin, 1 × connector 15-pin
Ethernet	10 / 100 Mbit	10 / 100 Mbit
IN/OUT	4 × IN, 4 × OUT for (IN – 5-24 VDC, OUT – max 30 VDC, 0.5 ADC)	4 × IN, 4 × OUT for (IN – 5-24 VDC, OUT – max 30 VDC, 0.5 ADC)
Wi-Fi®	802.11 b/g/n	802.11 b/g/n
Operated protocol	Modbus RTU	Modbus RTU
Power supply	10 – 28 VDC	10 – 28 VDC
Max power consumption	10 W	10 W
Operating temperature	–10 ÷ +40 °C	–10 ÷ +40 °C
Relative humidity**	10 ÷ 80%	10 ÷ 80%
Transport and storage temperature	–10 ÷ +50 °C	–10 ÷ +50 °C
Overall dimensions	206 × 140 × 71 mm	206 × 140 × 71 mm
Net weight	0.8 kg	0.8 kg
Gross weight	1.2 kg	1.2 kg
Packaging dimensions	300 × 250 × 130 mm	300 × 250 × 130 mm

\* optional version

\*\* non-condensing conditions

Wi-Fi® is a registered trademark of Wi-Fi® Alliance.

## Dimensions



## Accessories

### Peripheral Devices

- Epson dot matrix printer
- label printers Zebra
- WWG-2/5 large-size display
- LCD – WD-4/4 display (backlit)
- stack light
- keyboards, external switches
- transponder card scanner
- barcode scanner

### Weighing Platforms

- 1 load cell platforms
- 4 load cell platforms
- high resolution platforms

### Cables, Converters

- RS-232 – P0108 cable (scale - indicator)
- RS-232 – P0167 cable (scale - indicator)
- RS-232 – PT0301 cable (scale - indicator)
- RS-232 – P0151 Epson printer cable
- RS-232 – P0183 Zebra printer cable
- IN/OUT – PT0128 cables
- USB cable type A-B
- Ethernet cable
- AP2-1 – current loop unit (in stainless steel housing)
- K0047 – cigarette lighter cable

### Remaining accessories

- stands for indicators

## Dedicated Software

---

### **R-LAB**

- collecting measurements
- carrying out statistical analysis of measurements
- customized graphs and reports

### **Label Editor R02**

- designing label templates
- sending graphics and fonts to label printers
- printing label templates using connected printers

### **E2R PGC**

- synchronization of databases, operators, products schedules
- record of measurements and PGC controls carried out on weighing instruments linked in ETHERNET network
- quality assessment of pre- packaged goods based on acquired data

### **E2R Weighing Records**

- complete, automated databases synchronization
- fully supported processes of labelling and parts counting
- record of weighings, weighings archiving
- basic and advanced (with graphs) reports

### **E2R Formulations**

- carrying out simple formulations
- support of an advanced formulations orders function
- warehouse management
- optional automatic dispensing and constant correction of the dispensing process
- control of an ingredient using the barcode scanner

### **E2R Weighings**

- record of measurements carried out using the weighing indicators
- online monitoring of the production lines
- weighing thresholds control
- employees working time reporting

### **RAD KEY**

- Establishing cooperation between a weighing instrument and a computer

### **R.Barcode**

- The basic function software is presentation of the data sent by barcode scanners connected to PC via USB or RS232

### **Radwag Development Studio**

- presentation of functions (and subfunctions) of communication protocol (Common Communication Protocol)

- possibility of connection with weighing equipment on which each function is carried out,
- library with mass control, contained within the development environment
- complete documentation of the communication protocol
- set of user manuals for different solutions addressed for programmers employed in companies using RADWAG-manufactured weighing equipment

### **RADWAG Connect**

- establishing communication with all balances, scales and weighing modules using Common Communication Protocol
- communication via local network,
- support of basic functions
- auto searching for devices
- connecting with few devices simultaneously, swapping between them
- clear list of connected platforms
- record of measurements in the program,
- export of carried out measurements to CSV file,
- work performed using freely selected device with Windows 10

### **LabView Driver**

- operation of RADWAG balances in LabView environment

### **RADWAG Remote Desktop**

- remote operation via computer, mobile phone or tablet
- sending text messages
- version for Windows 10 and Android systems

### **Parameters Editor**

- remote change of parameters
- remote on-line preview of the display
- displaying current mass indication
- software update
- file loading, editing and saving parameters to a file
- import and export of parameters
- interfaces: RS232, Ethernet and Wireless Connection.
- quick and easy edition of balance parameters using computer.

### **Audit Trail Reader**

- support of Audit Trail function available for 3Y, 4Y, HY10, WLY, WPY series weighing instruments
- record of operator's activity from the moment of logging in