

# PS 3Y Precision Balances for PGC

Professional weighing under laboratory and slightly challenging industrial conditions.  
Balance with pre-packaged goods control option (PGC).



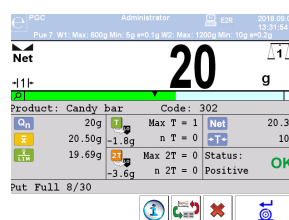
PS 3Y for KTP



PS 3Y.KTP  
with 195x195 mm weighing pan



Communication interfaces



PGC process  
on PS 3Y balance



Intuitive operation  
and touch screen

## Functions

|   |   |   |  |  |
|---|---|---|--|--|
|  Parts counting |  Percent weighing      |  Statistical quality control |  Under hook weighing |  Ambient conditions measurement |
|  Dosing         |  Statistics            |  Autotest                    |  GLP procedures      |  Replaceable unit               |
|  Checkweighing  |  Animal weighing       |  Density determination       |  Proximity sensors   |  Multilingual menu              |
|  Formulations   |  Differential weighing |  Pre-packaged goods control  |  |  |

## Features

### Pre-Packaged Goods Control

The function enables collecting measurements, carrying out pre-packaged goods control and generating reports. Different types of weighing instruments can be combined into a network. The control can be started on a balance or via computer software. It is automatically finished after a respective quantity of packages is verified. The control can be carried out in accordance with:

- the Regulation by the Central Office of Measures of 3 April 1997, on the requirements concerning quantity inspection of pre-packaged goods control, which inspection is to be carried out by means of random selection of the measurement results and sending those results to pre-packaged goods control procedure (FOR EUROPEAN UNION).
- a company quality control system (internal control).

### Reliable Results and High Measurement Precision

Excellent measurement parameters and performance enable applying PS 3Y.KTP balances in laboratories and various branches of industry.

### Weighing Heavy Loads with the Maximum Accuracy

Due to an exceptionally wide range of capacities it is possible to work with samples of different weight, from few grams to even over one hundred kilograms.

### Intuitive Operation and Touch Screen

5.7" colour touch screen enables intuitive operation and easy access to numerous applications and functions of the weighing instrument.

### Automatic Adjustment

Internal adjustment system guarantees the highest accuracy and reliable measurements results.

## Technical Specifications

|                                   | PS 750.3Y.PGC                                   | PS 1500.3Y.PGC                                  | PS 2500.3Y.PGC                                  |
|-----------------------------------|---|---|---|
| Maximum capacity [Max]            | 750 g   | 1500 g  | 2500 g  |
| Minimum load                      | 0.02 g  | 0.5 g   | 0.5 g   |
| Readability [d]                   | 0.01 g  | 0.1 g   | 0.1 g   |
| Verification scale interval [e]   | 0.01 g  | 0.1 g   | 0.1 g   |
| Tare range                        | −750 g  | −1500 g   | −2500 g   |
| Repeatability (5% Max)*           | 0.0005 g  | 0.01 g  | 0.01 g  |
| Repeatability (Max)               | 0.0015 g  | 0.015 g   | 0.015 g   |
| Linearity                         | ±0.003 g  | ±0.02 g   | ±0.02 g   |
| Sensitivity temperature drift**   | $2 \times 10^{-6} / ^\circ\text{C} \times R_t$  | $2 \times 10^{-6} / ^\circ\text{C} \times R_t$  | $2 \times 10^{-6} / ^\circ\text{C} \times R_t$  |
| Minimum weight (U=1%, k=2)        | 0.1 g   | 1 g   | 1 g   |
| Minimum weight (USP)              | 1 g   | 10 g  | 10 g  |
| Stabilization time                | 2 s   | 1.5 s   | 1.5 s   |
| Adjustment                        | internal  | internal  | internal  |
| Verification                      | Yes   | Yes   | Yes   |
| OIML Class                        | II  | II  | II  |
| Indicator fastening               | 35 cm cable,<br>wireless connection (option)*** | 35 cm cable,<br>wireless connection (option)*** | 35 cm cable,<br>wireless connection (option)*** |
| Display                           | 5.7" colour, resistive touch screen             | 5.7" colour, resistive touch screen             | 5.7" colour, resistive touch screen             |
| Keypad                            | 8 keys  | 8 keys  | 8 keys  |
| Protection class                  | IP 43   | IP 43   | IP 43   |
| Databases                         | 19  | 19  | 19  |
| Touch-free operation              | 2 programmable proximity sensors                | 2 programmable proximity sensors                | 2 programmable proximity sensors                |
| USB-A                             | 2   | 2   | 2   |
| Ethernet                          | 10 / 100 Mbit                                   | 10 / 100 Mbit                                   | 10 / 100 Mbit                                   |
| RS 232                            | 2   | 2   | 2   |
| Wi-Fi®                            | 802.11 b/g/n                                    | 802.11 b/g/n                                    | 802.11 b/g/n                                    |
| IN/OUT                            | 4 × IN, 4 × OUT                                 | 4 × IN, 4 × OUT                                 | 4 × IN, 4 × OUT                                 |
| Power supply                      | 13.5 ÷ 16 V                                     | 13.5 ÷ 16 V                                     | 13.5 ÷ 16 V                                     |
| Power consumption                 | 10 W  | 10 W  | 10 W  |
| Operating temperature             | +10 ÷ +40 °C                                    | +10 ÷ +40 °C                                    | +10 ÷ +40 °C                                    |
| Atmospheric humidity****          | 40 ÷ 80%  | 40 ÷ 80%  | 40 ÷ 80%  |
| Transport and storage temperature | −20 ÷ +50 °C                                    | −20 ÷ +50 °C                                    | −20 ÷ +50 °C                                    |
| Weighing pan dimensions           | 128 × 128 mm                                    | 195 × 195 mm                                    | 195 × 195 mm                                    |
| Weighing device dimensions        | 425 × 251 × 168 mm                              | 425 × 251 × 99 mm                               | 425 × 251 × 99 mm                               |
| Net weight                        | 5.7 kg  | 5.6 kg  | 5.6 kg  |
| Gross weight                      | 8.3 kg  | 8.2 kg  | 8.2 kg  |
| Packaging dimensions              | 720 × 360 × 260 mm                              | 720 × 360 × 260 mm                              | 720 × 360 × 260 mm                              |

$R_t$  net weight

\* repeatability is expressed as a standard deviation from 10 weighing cycles

\*\* parameter determined in the following temperature range: +15 ÷ +35 °C

\*\*\* optional solution on purchase order

\*\*\*\* non-condensing conditions

In accordance with type approval, the balance parameters are maintained in temperature range: +15 ÷ +35 °C.

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

## Technical Specifications

|                                   | PS 4500.3Y.M.PGC                                | PS 6100.3Y.M.PGC                                | PS 8100.3Y.M.PGC                                |
|-----------------------------------|---|---|---|
| Maximum capacity [Max]            | 4500 g  | 6100 g  | 8100 g  |
| Minimum load                      | 0.5 g   | 0.5 g   | 0.5 g   |
| Readability [d]                   | 0.1 g   | 0.1 g   | 0.1 g   |
| Verification scale interval [e]   | 0.1 g   | 0.1 g   | 0.1 g   |
| Tare range                        | −4500 g   | −6100 g   | −8100 g   |
| Repeatability (5% Max)*           | 0.005 g   | 0.005 g   | 0.005 g   |
| Repeatability (Max)               | 0.008 g   | 0.008 g   | 0.01 g  |
| Linearity                         | ±0.03 g   | ±0.03 g   | ±0.03 g   |
| Sensitivity temperature drift**   | $2 \times 10^{-6} / ^\circ\text{C} \times R_t$  | $2 \times 10^{-6} / ^\circ\text{C} \times R_t$  | $2 \times 10^{-6} / ^\circ\text{C} \times R_t$  |
| Minimum weight (U=1%, k=2)        | 1 g   | 1 g   | 1 g   |
| Minimum weight (USP)              | 10 g  | 10 g  | 10 g  |
| Stabilization time                | 1.5 s   | 1.5 s   | 1.5 s   |
| Adjustment                        | internal  | internal  | internal  |
| Verification                      | Yes   | Yes   | Yes   |
| OIML Class                        | II  | II  | II  |
| Indicator fastening               | 35 cm cable,<br>wireless connection (option)*** | 35 cm cable,<br>wireless connection (option)*** | 35 cm cable,<br>wireless connection (option)*** |
| Display                           | 5.7" colour, resistive touch screen             | 5.7" colour, resistive touch screen             | 5.7" colour, resistive touch screen             |
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| Protection class                  | IP 43   | IP 43   | IP 43   |
| Databases                         | 19  | 19  | 19  |
| Touch-free operation              | 2 programmable proximity sensors                | 2 programmable proximity sensors                | 2 programmable proximity sensors                |
| USB-A                             | 2   | 2   | 2   |
| Ethernet                          | 10 / 100 Mbit                                   | 10 / 100 Mbit                                   | 10 / 100 Mbit                                   |
| RS 232                            | 2   | 2   | 2   |
| Wi-Fi®                            | 802.11 b/g/n                                    | 802.11 b/g/n                                    | 802.11 b/g/n                                    |
| IN/OUT                            | 4 × IN, 4 × OUT                                 | 4 × IN, 4 × OUT                                 | 4 × IN, 4 × OUT                                 |
| Power supply                      | 13.5 ÷ 16 V                                     | 13.5 ÷ 16 V                                     | 13.5 ÷ 16 V                                     |
| Power consumption                 | 10 W  | 10 W  | 10 W  |
| Operating temperature             | +10 ÷ +40 °C                                    | +10 ÷ +40 °C                                    | +10 ÷ +40 °C                                    |
| Atmospheric humidity****          | 40 ÷ 80%  | 40 ÷ 80 %                                       | 40 ÷ 80 %                                       |
| Transport and storage temperature | −20 ÷ +50 °C                                    | −20 ÷ +50 °C                                    | −20 ÷ +50 °C                                    |
| Weighing pan dimensions           | 195 × 195 mm                                    | 195 × 195 mm                                    | 195 × 195 mm                                    |
| Weighing device dimensions        | 425 × 251 × 99 mm                               | 425 × 251 × 101 mm                              | 425 × 251 × 101 mm                              |
| Net weight                        | 5.6 kg  | 6.8 kg  | 6.8 kg  |
| Gross weight                      | 8.2 kg  | 9.4kg   | 9.4kg   |
| Packaging dimensions              | 716 × 360 × 260 mm                              | 716 × 360 × 260 mm                              | 716 × 360 × 260 mm                              |

Rt net weight

\* repeatability is expressed as a standard deviation from 10 weighing cycles

\*\* parameter determined in the following temperature range: +15 ÷ +35 °C

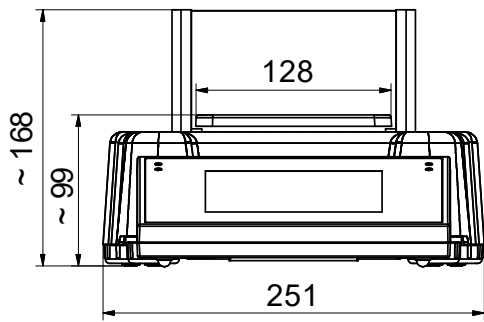
\*\*\* optional solution on purchase order

\*\*\*\* non-condensing conditions

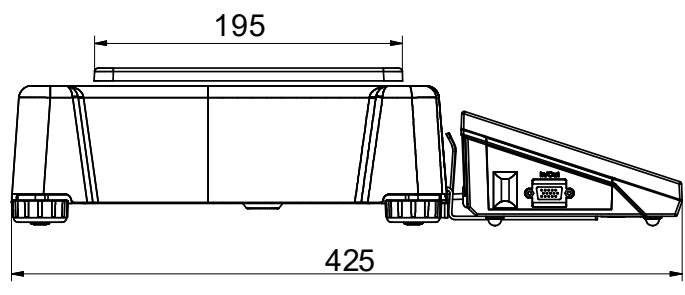
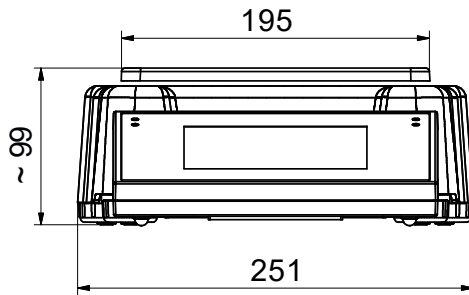
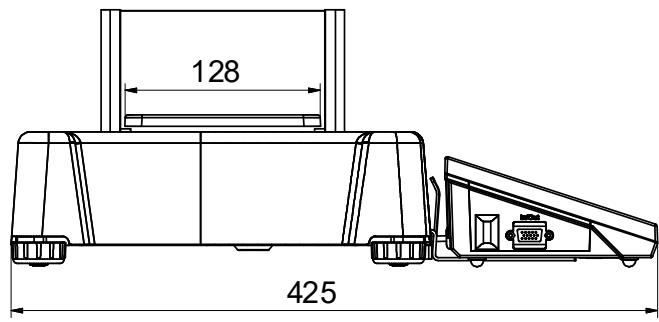
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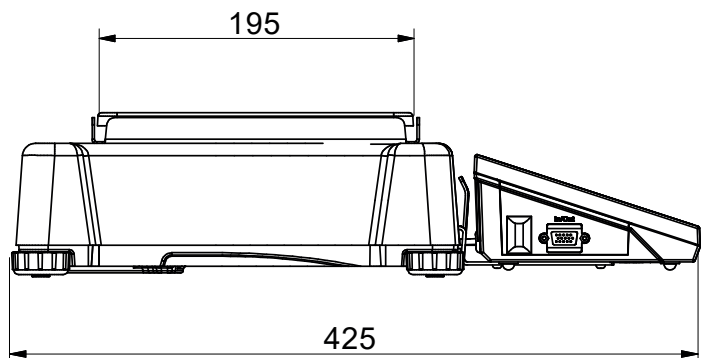
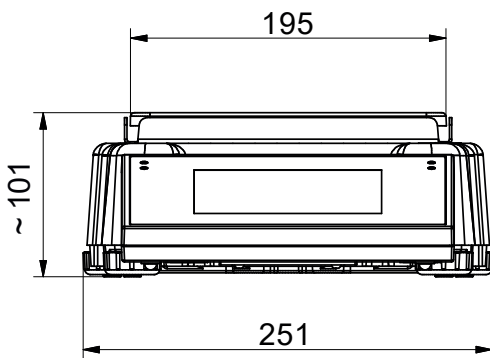
## Dimensions



PS 3Y.PGC, d = 0,001 g



PS 3Y.PGC, d = 0,01 g



PS 3Y.M.PGC, d = 0,01 g

## Accessories

### Weighing Tables

- granite antivibration table
- antivibration tables for laboratory balances
- professional weighing table

### Professional Weighing

- KIT 128 density determination kit, 195 kit
- under-hook weighing rack

### Ambient Conditions

- THB-S or THB-P sensor

### Peripheral Devices

- label printer
- receipt printer
- Epson dot matrix printer
- barcode scanners

- PA-04/H automatic feeder

- WD-5/3Y LCD display

### Cables, Converters

- P0108: RS 232 cable (balance-computer)
- P0167: RS 232 cable (balance-computer)
- P0151: RS 232 cable (balance - EPSON printer)

### Electrical Accessories

- ZR-02 power supply with battery

### Draft Shields and Anti-Draft Chambers

- draft shield with a weighing pan 128 x 128 mm
- protective cover indicator

### Remaining Accessories

- suitcase for PS

## Dedicated Software

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### **R-LAB**

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

### **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

### **Label Editor R02**

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

### **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

### **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

### **3Y Database Editor**

- databases readout
- databases editing
- databases saving - from computer software to connected weighing instrument
- connection with 3Y balances via Ethernet and 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

### **LabView Driver**

- operation of RADWAG balances in LabView environment

### **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 operating system

### **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.