

# PL.HRP High Resolution Scales

Unrivalled accuracy of weighing large loads in moist environment and at direct contact with water.



**PL.HRP** Max: 16 – 32 kg



High resolution weighing module in a hermetic housing



System protecting against overloading and mechanical shocks



**PL.HRP** Max: 150 – 2000 kg

## Features

#### The Most Precise Weighing Results in Industrial Conditions

Advanced PL.HRP platform enables fast and precise mass measurements in challenging industrial conditions. The scale enables carrying out measurements with very high resolutions available so far only for laboratory balances.

## Cooperation with with PUE HY10, PUE 5 and PUE 7.1 Indicators

The platform can be operated via advanced PUE HY10, PUE 5 and PUE 7.1 controlled by Windows system.

## **Reliability and Safety**

PL.HRP

Max: 62 – 120 kg

Robust platform made of stainless steel and high ingress protection allow to operate the scale in moist environment and at direct contact with water (e.g. meat and fish industry, etc.). The protection system against overloads and mechanical shocks ensures durability and endurance in everyday use.

#### **Automatic Adjustment**

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

## **Technical Specifications**

	PL.16.HRP*	PL.32.HRP*	PL.62.HRP	
Maximum capacity [Max]	16 kg	32 kg	62 kg	
Preload	4 kg	4 kg	30 kg	
Minimum capacity	5 g	5 g	25 g	
Readability [d]	0.1 g	0.1 g	0.5 g	
Verification unit [e]	_	_	_	
Tare range	–16 kg	-32 kg	–62 kg	
Repeatability **	0.1 g	0.1 g	0.3 g	
Linearity	±0.1 g	±0.3 g	±1 g	
Stabilization time ***	2 s	2 s	3 s	
Adjustment	internal	internal	internal	
Verification	_	_	_	
OIML class	_	_	—	
Platform material	Construction: powder-coated aluminium housing: stainless stell	Construction: powder-coated aluminium housing: stainless stell	plastic-coated steel	
Weighing pan material	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel	
Ingress protection - platform	IP 66/67	IP 66/67	IP 66/67	
RS 232	1	1	1	
RS 485	1	1	1	
Ethernet	10 / 100 Mbit	10 / 100 Mbit	10 / 100 Mbit	
IN/OUT****	$2 \times IN$ , $2 \times OUT$	$2 \times IN$ , $2 \times OUT$	$2 \times IN, 2 \times OUT$	
PROFIBUS module****	DP SLAVE	DP SLAVE	DP SLAVE	
Power supply	100 ÷ 240 V AC 50 ÷ 60 Hz	100 ÷ 240 V AC 50 ÷ 60 Hz	100 ÷ 240 V AC 50 ÷ 60 Hz	
Power consumption	5 W	5 W	5 W	
Operating temperature	+10 ÷ +40 ℃	+10 ÷ +40 ℃	+10 ÷ +40 ℃	
Relative humidity *****	15 ÷ 80%	15 ÷ 80%	15 ÷ 80%	
Transport and storage temperature	−10 ÷ +50 °C	−10 ÷ +50 °C	−10 ÷ +50 °C	
Weighing pan dimensions	360 × 280 mm	360 × 280 mm	500 × 500 mm	
Net weight	14,6 kg	14,6 kg	37 kg	
Gross weight	18,6 kg	18,6 kg	47 kg	
Platform packaging dimensions	550 × 463 × 350 mm	550 × 463 × 350 mm	700 × 700 × 295 mm	

\* MonoBLOCK™ measuring system

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

\*\*\* under optimum ambient conditions

\*\*\*\* optional interfaces installed interchangeably (for optional configuration: RS232 + PROFIBUS or RS232 + Ethernet + RS485 + 2xIN + 2xOUT)

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

	PL.120.HRP	PL.150.HRP	PL.300.HRP	
Maximum capacity [Max]	120 kg	150 kg 300 kg		
Preload	10 kg	30 kg	30 kg	
Minimum capacity	50 g	50 g	100 g	
Readability [d]	1 g	1 g	2 g	
Verification unit [e]	_	_	_	
Tare range	–120 kg	–150 kg	–300 kg	
Repeatability *	0.6 g	1.5 g	3 g	
Linearity	±1 g	±3 g	±6 g	
Stabilization time **	3 s	3 s	3 s	
Adjustment	internal	internal	internal	
Verification	—	_		
OIML class				
Platform material	plastic-coated steel	plastic-coated steel	plastic-coated steel	
Weighing pan material	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel	
Ingress protection - platform	IP 66/67	IP 66/67	IP 66/67	
RS 232	1	1	1	
RS 485	1	1	1	
Ethernet	10 / 100 Mbit	10 / 100 Mbit	10 / 100 Mbit	
IN/OUT***	$2 \times IN, 2 \times OUT$	$2 \times IN$ , $2 \times OUT$	$2 \times IN, 2 \times OUT$	
PROFIBUS module***	DP SLAVE	DP SLAVE	DP SLAVE	
Power supply	100 ÷ 240 V AC 50 ÷ 60 Hz	100 ÷ 240 V AC 50 ÷ 60 Hz	100 ÷ 240 V AC 50 ÷ 60 Hz	
Power consumption	5 W	5 W	5 W	
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 ℃	
Relative humidity ****	15 ÷ 80%	15 ÷ 80%	15 ÷ 80%	
Transport and storage temperature	-10 ÷ +50 ℃	-10 ÷ +50 ℃ -10 ÷ +50 ℃		
Weighing pan dimensions	$500 \times 500 \text{ mm}$	800 × 600 mm	800 × 600 mm	
Net weight	37 kg	71.5 kg	71.5 kg	
Gross weight	47 kg	119 kg1	119 kg	
Platform packaging dimensions	700 × 700 × 295 mm	1000 × 800 × 307 mm	1000 × 800 × 307 mm	

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repeatability is expressed as a standard deviation from 10 weighing cycles under optimum ambient conditions optional interfaces installed interchangeably (for optional configuration: RS232 + PROFIBUS or RS232 + Ethernet + RS485 + 2xIN + 2xOUT) non-condensing conditions \*\*\*

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	PL.300.1.HRP	PL.600.HRP	PL.1100.HRP	
Maximum capacity [Max]	300 kg	600 kg	1100 kg	
Preload	30 kg	60 kg	100 kg	
Minimum capacity	100 g	250 g	500 g	
Readability [d]	2 g	5 g	10 g	
Verification unit [e]	_	_	_	
Tare range	–300 kg	–600 kg	–1100 kg	
Repeatability *	3 g	7.5 g	15 g	
Linearity	±6 g	±15 g	±30g	
Stabilization time **	3 s	3 s	3 s	
Adjustment	internal	internal	internal	
Verification	—	—	—	
OIML class	_	—	—	
Platform material	plastic-coated steel	plastic-coated steel	plastic-coated steel	
Weighing pan material	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel	
Ingress protection - platform	IP 66/67	IP 66/67	IP 66/67	
RS 232	1	1	1	
RS 485	1	1	1	
Ethernet	10 / 100 Mbit	10 / 100 Mbit	10 / 100 Mbit	
IN/OUT***	$2 \times IN, 2 \times OUT$	$2 \times IN, 2 \times OUT$	$2 \times IN, 2 \times OUT$	
PROFIBUS module***	DP SLAVE	DP SLAVE	DP SLAVE	
Power supply	100 ÷ 240 V AC 50 ÷ 60 Hz	100 ÷ 240 V AC 50 ÷ 60 Hz	100 ÷ 240 V AC 50 ÷ 60 Hz	
Power consumption	5 W	5 W	5 W	
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C	
Relative humidity ****	15 ÷ 80%	15 ÷ 80%	15 ÷ 80%	
Transport and storage temperature	−10 ÷ +50 °C	-10 ÷ +50 ℃	-10 ÷ +50 ℃	
Weighing pan dimensions	1000 × 800 mm	1000 × 800 mm	1000 × 800 mm	
Net weight	126 kg	126 kg	126 kg	
Gross weight	160 kg	160 kg	160 kg	
Platform packaging dimensions	1200 × 1000 × 328 mm	1200 × 1000 × 328 mm	1200 × 1000 × 328 mm	

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repeatability is expressed as a standard deviation from 10 weighing cycles under optimum ambient conditions optional interfaces installed interchangeably (for optional configuration: RS232 + PROFIBUS or RS232 + Ethernet + RS485 + 2xIN + 2xOUT) \*\*\*

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

	PL.2000.HRP
Maximum capacity [Max]	2000 kg
Preload	200 kg
Minimum capacity	200 g
Readability [d]	20 g
Verification unit [e]	_
Tare range	–2000 kg
Repeatability *	30 g
Linearity	±60g
Stabilization time **	3 s
Adjustment	internal
Verification	_
OIML class	_
Platform material	plastic-coated steel
Weighing pan material	AISI304 stainless steel
Ingress protection - platform	IP 66/67
RS 232	1
RS 485	1
Ethernet	10 / 100 Mbit
IN/OUT***	$2 \times IN, 2 \times OUT$
IN/OUT*** PROFIBUS module***	2 × IN, 2 × OUT DP SLAVE
IN/OUT*** PROFIBUS module*** Power supply	2 × IN, 2 × OUT DP SLAVE 100 ÷ 240 V AC 50 ÷ 60 Hz
IN/OUT*** PROFIBUS module*** Power supply Power consumption	2 × IN, 2 × OUT DP SLAVE 100 ÷ 240 V AC 50 ÷ 60 Hz 5 W
IN/OUT*** PROFIBUS module*** Power supply Power consumption Operating temperature	2 × IN, 2 × OUT DP SLAVE 100 ÷ 240 V AC 50 ÷ 60 Hz 5 W +10 ÷ +40 °C
IN/OUT*** PROFIBUS module*** Power supply Power consumption Operating temperature Relative humidity ****	2 × IN, 2 × OUT DP SLAVE 100 ÷ 240 V AC 50 ÷ 60 Hz 5 W +10 ÷ +40 °C 15 ÷ 80%
IN/OUT*** PROFIBUS module*** Power supply Power consumption Operating temperature Relative humidity **** Transport and storage temperature	2 × IN, 2 × OUT DP SLAVE 100 ÷ 240 V AC 50 ÷ 60 Hz 5 W +10 ÷ +40 ℃ 15 ÷ 80% -10 ÷ +50 ℃
IN/OUT*** PROFIBUS module*** Power supply Power consumption Operating temperature Relative humidity **** Transport and storage temperature Weighing pan dimensions	2 × IN, 2 × OUT DP SLAVE 100 ÷ 240 V AC 50 ÷ 60 Hz 5 W +10 ÷ +40 °C 15 ÷ 80% -10 ÷ +50 °C 1250 × 1000 mm
IN/OUT*** PROFIBUS module*** Power supply Power consumption Operating temperature Relative humidity **** Transport and storage temperature Weighing pan dimensions Net weight	2 × IN, 2 × OUT DP SLAVE 100 ÷ 240 V AC 50 ÷ 60 Hz 5 W +10 ÷ +40 °C 15 ÷ 80% -10 ÷ +50 °C 1250 × 1000 mm 290 kg
IN/OUT*** PROFIBUS module*** Power supply Power consumption Operating temperature Relative humidity **** Transport and storage temperature Weighing pan dimensions Net weight Gross weight	2 × IN, 2 × OUT DP SLAVE 100 ÷ 240 V AC 50 ÷ 60 Hz 5 W +10 ÷ +40 °C 15 ÷ 80% -10 ÷ +50 °C 1250 × 1000 mm 290 kg 415 kg

repeatability is expressed as a standard deviation from 10 weighing cycles under optimum ambient conditions \*

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\*\*\* optional interfaces installed interchangeably (for optional configuration: RS232 + PROFIBUS or RS232 + Ethernet + RS485 + 2xIN + 2xOUT)

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



PL.16 - 32.HRP

Scale type	A1	A2	Н
PL.16 -32.HRP	360	280	139±3
PL.62 -120.HRP	500	500	150±3
PL.150 - 300.HRP	800	600	175±3
PL.300.1 -1100.HRP	1000	800	175±3
PL.2000.HRP	1250	1000	175±3

## Accessories

### Cables, Converters

- PT0347 RS 232 cable (platform terminal PUE HY10, PUE 5)
- PT0348 RS 232 cable (platform computer)
- P0198 Ethernet cable (M12 4P)
- PT0302 Ethernet cable with straight plug (platform terminal PUE HY10, PUE 5)
- PT0303 Ethernet cable with angle plug (platform terminal PUE HY10, PUE 5)
- PT0256 IN/OUT cable

# **Dedicated Software**

#### MWMH-MANAGER

- option of adjustement of HRP platforms and MWSH, MWLH and MWMH modules,
- option of readout of mass from HRP platforms and modules using the computer,
- option of taring and zeroing HRP platforms and modules using the computer,
- option of setting weighing filters for HRP platforms and modules. **RAD-KEY**
- data acquired from a weighing instrument
- different ways of initializing the process of acquiring data from the weighing instrument and sending it to a computer
- readout of characters transmitted via RS 232 to a computer

#### 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

#### Compatible weighing terminals

- PUE HY10
- PUE 5.15 / PUE 5.19
- PUE 7.1

#### **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 LabViewR.Barcode environment
- presentation of information sent by a barcode scanner