

# MWLH weighing modules

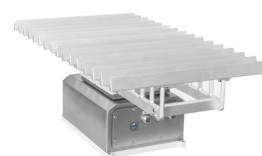
Series of professional electromagnetic modules of high resolution guarantees highly precise and fast measurement.



MWLH



Easy access to the most functional interfaces



Ease of adaptation to the required storage space

## Features

### Vast Max Capacity Range

Magnetolectric weighing modules MWLH are intended for mass measurement ranging from 10kg to 35kg. Minimum readability of 0.01g guarantees amazing accuracy for your measurement.

### Protection Against Challenging Conditions

Hermetic versions of modules feature stainless steel housing with IP65. This allows operation even in the most challenging conditions. Mechanical design lacks sharp edges and gaps which ensures adherence to HACCP, GMP and FDA standards for safety and quality of operation.

### Fast and Precise Measurement

High measurement accuracy with  $sd=1d^*$  guarantees both readout of real weighing results and repeatability of indications. Cutting-edge design solutions provide fast measurement which is an asset allowing to install the module on automated production lines. Intended for fast and dynamic measuring processes the weighing module's converter throughput is 3200 meas./s \*\*.

### Cooperation with terminals

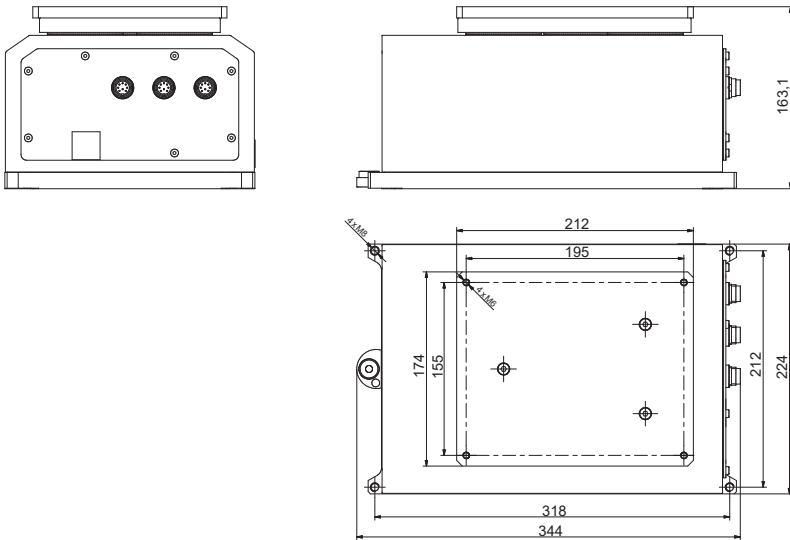
Connecting the module to a multifunctional weighing terminal expands communication interfaces range and increases usage in industrial applications.

## Technical Specifications

	MWLH 10	MWLH 25	MWLH 30	MWLH 35
<b>Maximum capacity [Max]</b>	10 kg	25 kg	30 kg	35 kg
<b>Input load (preload range)</b>	1 kg	2.5 kg	3 kg	3.5 kg
<b>Minimum capacity</b>	0.5 g	5 g	5 g	5 g
<b>Readability [d]</b>	0.01 g	0.1 g	0.1 g	0.1 g
<b>Verification unit [e]</b>	—	—	—	—
<b>Tare range</b>	-10 kg	-25 kg	-30 kg	-35 kg
<b>Repeatability*</b>	0.01 g	0.1 g	0.1 g	0.1 g
<b>Linearity</b>	±0.02 g	±0.1 g	±0.3 g	±0.3 g
<b>Sensitivity temperature drift**</b>	$2 \times 10^{-6} / ^\circ\text{C} \times R_t$	$2 \times 10^{-6} / ^\circ\text{C} \times R_t$	$2 \times 10^{-6} / ^\circ\text{C} \times R_t$	$2 \times 10^{-6} / ^\circ\text{C} \times R_t$
<b>Stabilization time</b>	3 s	2 s	2 s	2 s
<b>Adjustment</b>	external	external	external	external
<b>Verification</b>	—	—	—	—
<b>OIML Class</b>	—	—	—	—
<b>Construction material</b>	construction aluminium, housing AISI304	aluminium	aluminium	aluminium
<b>Weighing pan material</b>	aluminium	aluminium	aluminium	aluminium
<b>Display</b>	—	—	—	—
<b>Protection class</b>	IP 65	IP 65	IP 65	IP 65
<b>RS 232</b>	1	1	1	1
<b>RS 485</b>	1	1	1	1
<b>Ethernet</b>	1	1	1	1
<b>IN/OUT</b>	2 × IN, 2 × OUT	2 × IN, 2 × OUT	2 × IN, 2 × OUT	2 × IN, 2 × OUT
<b>Transmission protocols</b>	RADWAG, ASCII code, MODBUS	RADWAG, ASCII code, MODBUS	RADWAG, ASCII code, MODBUS	RADWAG, ASCII code, MODBUS
<b>PROFIBUS module***</b>	1	1	1	1
<b>Power supply</b>	12 ÷ 24 V DC	12 ÷ 24 V DC	12 ÷ 24 V DC	12 ÷ 24 V DC
<b>Power consumption</b>	5 W	5 W	5 W	5 W
<b>Operating temperature</b>	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C
<b>Atmospheric humidity****</b>	15 ÷ 80%	15 ÷ 80%	15 ÷ 80%	15 ÷ 80%
<b>Transport and storage temperature</b>	-20 ÷ +50 °C	-20 ÷ +50 °C	-20 ÷ +50 °C	-20 ÷ +50 °C
<b>Weighing pan dimensions</b>	212 × 174 mm	212 × 174 mm	212 × 174 mm	212 × 174 mm
<b>Weighing device dimensions</b>	344 × 224 × 164 mm	344 × 224 × 164 mm	344 × 224 × 164 mm	344 × 224 × 164 mm
<b>Net weight</b>	12.4 kg	12.4 kg	12.4 kg	12.4 kg
<b>Gross weight</b>	15 kg	15 kg	15 kg	15 kg
<b>Packaging dimensions</b>	580 × 413 × 360 mm	580 × 413 × 360 mm	580 × 413 × 360 mm	580 × 413 × 360 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  
 \*\*\* interface installed interchangeably with Ethernet, IN/OUT, RS 485  
 \*\*\*\* non-condensing conditions

## Dimensions



MWLH

## Accessories

### Cables, Converters

- PT0347 – RS 232 cable (platform – terminal PUE HY10, PUE 5)
- PT0348 – RS 232 cable (platform – computer)
- 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
- P0198 – Ethernet cable (M12 4P)

### Compatible Weighing Werminals

- PUE HY10

### Electrical Accessories

- power supply SYS-1544-2415-T3-HR

## Dedicated Software

### MWMH-Manager

- option of adjustment 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

- Establishing cooperation between a weighing instrument and 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

### 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