

# Weighing module MW-01

Series of professional modules intended to operate as a component of load-cell scales used in industry



MW-01



Housing – IP66



Easy access to interfaces

## Features

### Vast Range of Applications

MW-01 module is designed to operate as a component of industrial single-platform load-cell scales of automated industrial systems and computer systems where direct mass readout on an indicator is not required. It is intended for OEMs and system integrators. Resistant to mechanical damage, aluminium housing of IP66 predisposes the device to be used in harsh industrial conditions. The module is a part of silo scale construction, and of various dosing, packing, control and multiplatform industrial weighing systems.

### Measurement Precision

The module together with a platform can form 1-load-cell static scales of accuracy up to few tens of thousands of reading units. Converter's throughput of up to 1600 samples allows to use the module in rapidly changing dosing processes. The advanced A/D converters guarantee precise mass measurements.

### Expanded Weighing Workstations

Connecting the module with a weighing indicator of Radwag production allows to increase the quantity of operated platforms. With this, the scale functionality is improved which in turn reduces costs regarding the weighing system.

### Communication

The module can cooperate with industrial indicators manufactured by Radwag, PC software, PLC controllers and HMI operation panels. Vast range of communication interfaces includes RS232 and RS485 serial ports, Ethernet, Profibus DP. The module features implemented, expanded communication protocols: ASCII, Modbus RTU and TCP. Module is equipped with 2 digital inputs and outputs which may be used to control dispensing process, signalling of checkweighing thresholds, and control of basic scale functions (taring, zeroing).

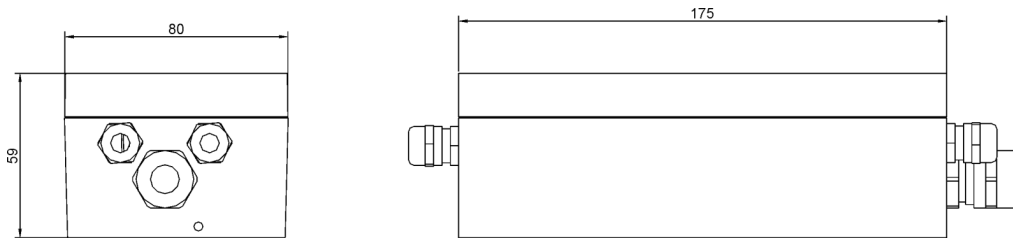
## Technical Specifications

	<b>MW-01-1</b>	<b>MW-01-2</b>
<b>Verifying units</b>	10 000	10 000
<b>OIML Class</b>	III	III
<b>Maximal increase of signal</b>	19.5 [mV]	19.5 [mV]
<b>Minimal voltage on one verifying unit</b>	0.5 [ $\mu$ V]	0.5 [ $\mu$ V]
<b>Minimal impedance range of load cell</b>	80 [ $\Omega$ ]	80 [ $\Omega$ ]
<b>Maximal impedance range of load cell</b>	1200 [ $\Omega$ ]	1200 [ $\Omega$ ]
<b>Voltage on load cel</b>	5V DC	5V DC
<b>Connection of load cell</b>	4 or 6 cables + shielding	4 or 6 cables + shielding
<b>Quantity of platforms</b>	1	1
<b>Multi-range possibility</b>	YES	YES
<b>Housing</b>	Mild steel	Mild steel
<b>Ingress protection</b>	IP 66	IP 66
<b>RS 485</b>	1	—
<b>RS 232</b>	1	1
<b>Ethernet</b>	10 / 100 Mbit	—
<b>IN/OUT (option)</b>	2 $\times$ IN, 2 $\times$ OUT	2 $\times$ IN, 2 $\times$ OUT
<b>Transmission protocols</b>	Modbus RTU	Modbus RTU
<b>PROFIBUS Module</b>	—	1
<b>Power supply</b>	8 $\div$ 30V DC	8 $\div$ 30V DC
<b>Power consumption</b>	2W	2W
<b>Operating temperature</b>	-10 $\div$ +40 $^{\circ}$ C	-10 $\div$ +40 $^{\circ}$ C
<b>Atmospheric humidity*</b>	15 $\div$ 85%	15 $\div$ 85%
<b>Transport and storage temperature</b>	-20 $\div$ +50 $^{\circ}$ C	-20 $\div$ +50 $^{\circ}$ C
<b>Weighing device dimensions</b>	175 $\times$ 80 $\times$ 59 mm	175 $\times$ 80 $\times$ 59 mm
<b>Net weight</b>	0.7 kg	0.7 kg
<b>Gross weight</b>	1 kg	1 kg
<b>Packaging dimensions</b>	300 $\times$ 250 $\times$ 130 mm	300 $\times$ 250 $\times$ 130 mm

\* non-condensing conditions

## Dimensions

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MW-01

## Accessories

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### Compatible Weighing Terminals

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

### Peripheral Devices

- Additional LCD display

## Dedicated Software

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### MW MANAGER

- Adjustment (calibration) of the weighing module MW-01 and MW-04
- Mass reading and displaying from the weighing module MW-01 and MW-04 on PC computer's display
- Taring and zeroing of the MW-01 and MW-04 from computer level
- Setting linearity of the MW-01 and MW-04
- Setting weighing filters for the MW-01 and MW-04

### 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

### R-LAB

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

### R.Barcode

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