

Weighing module MW-04

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



MW-04



Housing – IP65



Easy access to interfaces

Features

Vast Range of Applications

MW-04 module is designed to operate as a component of industrial multi-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 IP65 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.

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.

Measurement Precision

The module together with a platform can form 1-load-cell or multi-load-cell static scales of accuracy up to few tens of thousands of reading units. Converter's throughput of up to 80 samples allows to use the module in rapidly changing dosing processes. The advanced A/D converters guarantee precise mass measurements.

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. In addition, it can be equipped with 4 digital inputs and outputs which may be used to control dispensing process, signalling of checkweighing thresholds, and control of basic scale functions (taring, zeroing).

Special-Purpose

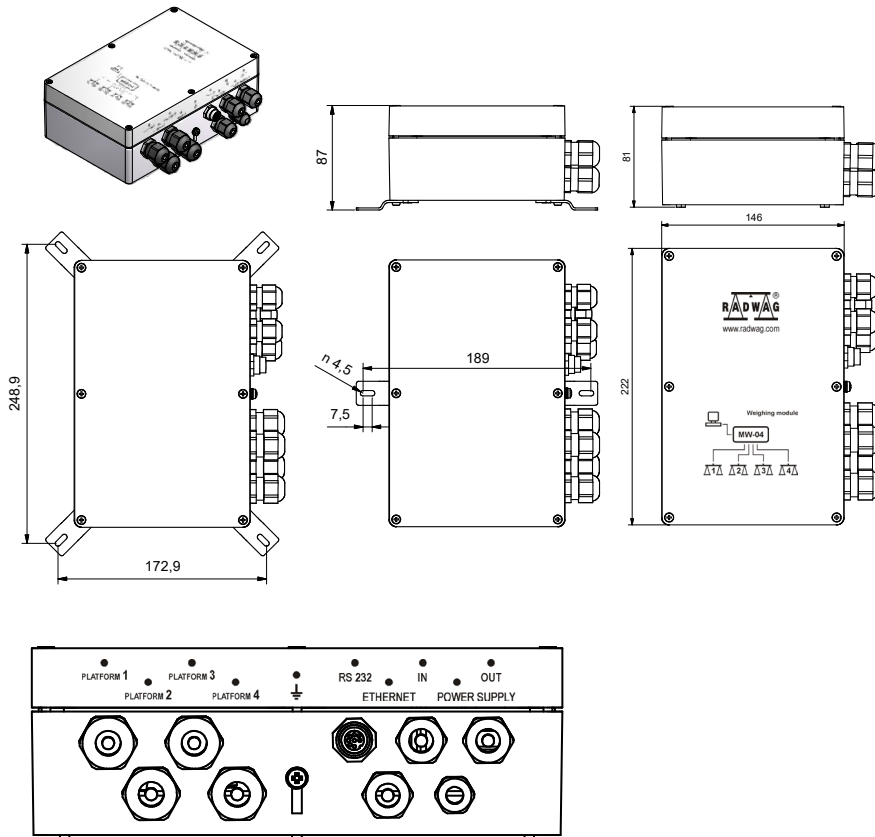
Module MW-04 module is used to perform discrete weighing (no use of an indicator) on a production lines in places with limited access, where instant readout of mass is not required (only record of weighings). It can also be applied in huge pit scales (module installed under the scale). The MW-04 may be a component of large special purpose scales, e.g. intended to measure silos weight.

Technical Specifications

	MW-04-1	MW-04-2	MW-04-3
Reading units	6 000	6 000	6 000
Maximal increase of signal	19.5 [mV]	19.5 [mV]	19.5 [mV]
Minimal voltage on one reading unit	0.4 [µV]	0.4 [µV]	0.4 [µV]
Minimal impedance range of load cell	80 [Ω]	80 [Ω]	80 [Ω]
Maximal impedance range of load cell	1200 [Ω]	1200 [Ω]	1200 [Ω]
Voltage on load cel	5V DC	5V DC	5V DC
Connection of load cell	4 or 6 cables + shielding	4 or 6 cables + shielding	4 or 6 cables + shielding
Standardowa liczba platform wagowych	2	2	2
Multi-range possibility	YES	YES	YES
Housing	Mild steel	Mild steel	Mild steel
Ingress protection	IP 65	IP 65	IP 65
RS 485	—	1	—
RS 232	1	1	1
Ethernet	10 / 100 Mbit	—	—
IN/OUT	4 IN, 4 × OUT	4 × IN, 4 × OUT	—
Transmission protocols	Modbus RTU	Modbus RTU	Modbus RTU
PROFIBUS Module	—	—	1
Power supply	100 ÷ 240V AC 50÷60 Hz	100 ÷ 240V AC 50÷60 Hz	100 ÷ 240V AC 50÷60 Hz
Power consumption	25W	25W	25W
Operating temperature	-10 ÷ +40 °C	-10 ÷ +40 °C	-10 ÷ +40 °C
Atmospheric humidity*	15 ÷ +85%	15 ÷ +85%	15 ÷ +85%
Transport and storage temperature	-20 ÷ +50 °C	-20 ÷ +50 °C	-20 ÷ +50 °C
Weighing device dimensions	222 × 146 × 81 mm	222 × 146 × 81 mm	222 × 146 × 81 mm
Net weight	2 kg	2 kg	2 kg
Gross weight	3 kg	3 kg	3 kg
Packaging dimensions	300 × 250 × 130 mm	300 × 250 × 130 mm	300 × 250 × 130 mm

* non-condensing conditions

Dimensions



MW-04

Accessories

Compatible Weighing Terminals

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

Peripheral Devices

- Additional weighing platform module

Dedicated Software

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