# PR 1612/02

# Compact Weighing Indicator


- High accuracy W&M indicator EC conformity certificate 3000d acc. to EN 45501 (corresp. to OIML R 76)
- 2 opto-isolated limit outputs
- Optional:
  - Serial interface (current loop, RS 232 or RS 422/485)
  - Analog- / BCD output
  - Communication protocols
  - PROFIBUS-DP
- Luminous vacuum fluorescent display
- IP 65 front panel protection class
- compact design (Panel mounting)

**Product Profile**
The PR 1612/02 weight indicator is particularly suited for Weights & Measures approved applications such as cranes, platforms, silos and weighbridges.
Operating via:
- front panel
- a remote display
- communication from a supervisory system (Dust, JBUS/MODBUS, Teleperm, PROFIBUS-DP)

The PR 1612/02 weight indicator is available in a robust aluminium housing for front panel mounting. Utmost interference suppression and longterm stability guarantees optimum use in harshest environments.

**Specific Features**
- Easy and comfortable operation, calibration and configuration routines
- Calibration without weights (input of load cell identification data)
- Load cell supply voltage of 12V or 20V
- Automatic zero tracking
- Multi-range scales possible (3 scales)
- SW and HW options extendable later on
- Easy connection to existing control systems because of several communication protocols

**Technical Data**

**Housing**
Dimension: 96 x 192 x 229mm
Panel cutout: 187+1 x 91+1mm
Material: aluminium
Protection class: IP 30
Front panel: IP 65

**Supply Voltage**
110V/220$V_{AC}$, -15%/+10%, 50/60Hz

**Power Consumption**
25VA / 19W

**M.T.B.F.**
35,000 hours

**Display**
Type: vacuum fluorescent-display
Elements: 7-digit (7 segments)
Hight: 12,5mm
Colour: bright green
plus weighing and status symbols

**Status Indicators**

| | |
|---|---|
| -> 0 <- | zero display within ± 1/4d |
| ◺◿ | standstill |
| B | gross weight display |
| NET | net weight display |
| T | tare weight display |

Dimensions can be set for: g, kg, t, lb
Decimal point can be set

**Control outputs**
Number: 2, opto-isolated output
Voltage: max. 32$V_{DC}$
Current: max. 75mA

**Accuracy**
3000e class III acc. to EN 45501; corresponds to OIML R 76

**Load cell connection**
All strain gauge loadcells,
6- or 4-wire connection

**Load cell supply**
12V/20$V_{DC}$ – selectable, short-circuit proof. External load cell supply possible.

**Minimum load impedance (internal supply)**
min 87.5Ω
e.g. 6 load cells with 600Ω
or 4 load cells with 350Ω

**Measuring principle**
Measuring amplifier: integrating converter; ratiometric to LC supply
Conversion time: 50ms.
Measuring time: 100ms to 2s, can be set at intervals of 100ms

**Environmental Conditions**

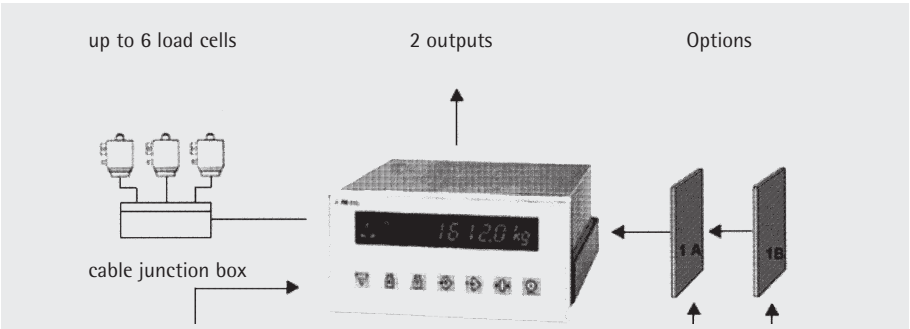
**Temperature**
W&M operation: –10°C to +40°C
Industrial: –10°C to +55°C
Storage: –40°C to +70°C

**Vibration**
acc. to IEC 68-2-6 Test Fc

**Static discharge**
acc. to IEC 1000-4-2

**Electromagnetic field**
acc. to IEC 1000-4-3 26MHz to 1GHz
Interference on mains, input/output
acc. to IEC 1000-4-4

**Radio noise suppression**
acc. to EN 55011




SW Option PR 1613/05
available communication protocols
- DUST 3964 R
- TELEPERM
- JBUS/MODBUS

**Serial Interface Options (I selectable)**

| | |
|---|---|
| PR 1601/00 | Current loop (TTY) |
| PR 1602/00 | RS 232 (V24) |
| PR 1604/00 | RS 422/RS 485 |

| | |
|---|---|
| PR 1606/00 | 0-10V, 0-20mA 2-10V, 4-20mA, analog-output |
| PR 1608/80 | Analog/BCD output (open emitter) |
| PR 1608/81 | Analog/BCD output (open collector) |
| PR 1608/00 | BCD output (open emitter) |
| PR 1608/10 | BCD output (open collector) |
| PR 1621/00 | PROFIBUS-DP (12Mbit/s) |

**Electrical safety**
acc. to IEC 1010-1

**Measuring range**
Meas. Signal: 2.4mV to 36mV
(for 100% nominal load)
Dead load: 0... 33.6mV
There is no interaction between dead load and measuring range

**Resolution (Internal)**
0.2mV / div. (max. 180,000 Counts)

**Analog filter**
Active Butterworth low pass filter, 40dB / decade, 2Hz cut-off frequency

**Linearity**
< 0.007%

**Temperature effects**
Zero: < 0.1mV/K RTI
Span: < 0.006%/10K

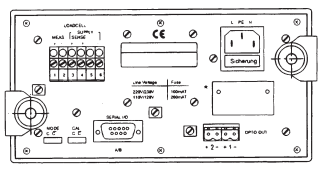
**Packing Size**
291 x 331 x 160mm

**Weight**
Net: 3.5kg
Shipping: 4.4kg

**Order information**

| Type | Description | Order numbers |
|---|---|---|
| PR1601/00 | Current loop (TTY) | 9405 316 01001 |
| PR1602/00 | RS 232 (V24) | 9405 316 02001 |
| PR1604/00 | RS 422/485 | 9405 316 04001 |
| PR1606/00 | Analog output | 9405 316 06001 |
| PR1606/80 | Analog/BCD output (open emitter) | 9405 316 06801 |
| PR1606/81 | Analog/BCD output (open collector) | 9405 316 06811 |
| PR1608/00 | BCD-output (open emitter) | 9405 316 08001 |
| PR1608/10 | BCD-output (open collector) | 9405 316 08101 |
| PR1613/05 | Communication-option | 9405 316 13051 |
| PR1621/00 | PROFIBUS-DP | 9405 316 21001 |

Rear panel PR 1612/02



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