

# The compact professionals<sup>2</sup>

EC trade approved and OIML certified

Classes  $\text{\textcircled{III}}$  and  $\text{\textcircled{III}}$

## 82b<sup>2</sup>



## 82c<sup>2</sup>



- compact stainless steel enclosure
- high IP67 rating
- alibi memory admissible for verification

- white backlight
- large 27 mm LC display

## Measured applications and functions!

Boasting premium heavy-duty stainless steel enclosures and an IP67 rating, our legal for trade indicators 82b2 and 82c2 can be deployed for all manner of applications. The 14-segment-LCD with white backlight offers outstanding read quality in all light conditions, as does the visual signalling device integrated in the enclosure. An integral switched-mode power supply guarantees stable operation even during the inevitable supply fluctuations.

Well laid out keys make for easy instrument operation – both for standard weighing functions and other tasks such as counting and accumulating. The battery-buffered clock, legal-for-trade alibi memory, and standard and optional interfaces come into play whenever communication with control computers or integration in an ERP system is required.

**RHEWA**

Waagen

... verified quality.



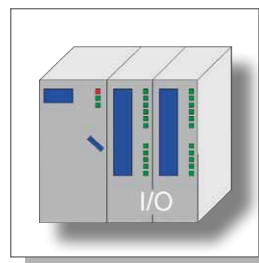
**Operation**

- On-Off
- Menu
- Info



**Visual signalling device\***

- Three colours (blue, red, green) for easy target/actual monitoring (interval switching function) or instrument status indication (tare, zero position, stable equilibrium, data output)



**Switching and control**

Inputs and outputs

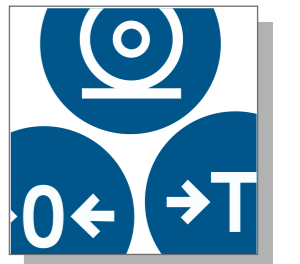
The indicator 82c<sup>2</sup> has a numeric keypad for entering tare values, unit weights, reference quantities and variables; it also comes with three user-assignable function keys for user-friendly, custom weighing workflows created using the RHEWA script language. Functions such as accumulate, count, and target weight and quantity control, coupled with options such as inputs, outputs, analogue output and a variety of software modules, offer the flexibility you need for a broad range of applications.

**82c<sup>2</sup>**



**82b<sup>2</sup>**

The indicator 82b<sup>2</sup> is suited for simple, intuitive weighing tasks and allows (serial or Ethernet) connectivity to printers and legally relevant computer systems thanks to the alibi memory device fitted as standard.



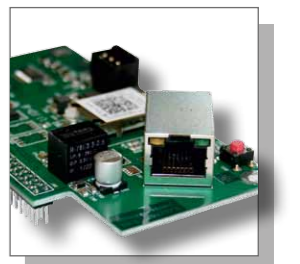
**Weighing functions**

- Print
- Zero
- Tare



**Legal for trade alibi memory**

with direct data transmission to PC without printer



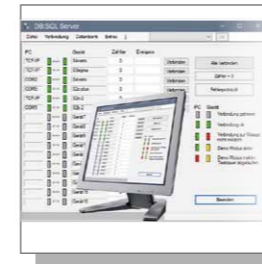
**Option cards**

- Ethernet
- Profibus
- Analogue output
- WiFi
- RS-422



### 10 user-configurable weighing sequences and print layouts

- User-programmable guided operating sequences
- Custom print tickets
- Self-generating standard print tickets as per active weighing function



### Software modules

- PC software\* (Datalog-SQL)
- PC software\* (Datarouter)
- Statistics function\*, FPVO-compliant
- Warehouse management/stocktaking
- Target weighing
- Animal weighing software



### Accessories

Ability to connect peripherals such as printers, scanners, large displays, data loggers and PCs via serial interface(s)

## Enclosure

- Enclosure in stainless chrome nickel steel 1.4301
- Net weight: 2.1 kg
- Rear cable egress with metric glands

## Keypad

- Membrane keypad (polyester)
- Service life > 1 m keypresses
- High resistance to most aggressive substances
- **82b<sup>e</sup>** : 6 keys
- **82c<sup>e</sup>** : 27 keys

## Display

- 14 segment LC weight display, 27 mm, backlight, 7-digit
- Status indication of active weighing functions

## Ambient conditions

- EMC emissions: EN 55011
- Operating temperature: -10 °C to +40 °C
- Storage temperature: -20 °C to +65 °C
- Humidity: max. 85 %, non-condensing
- Ingress protection: IP 67, DIN/VDE 0470 (protection against dust, contact and water jets, temporary immersion possible)

## Electrical connection

- Integral switched-mode power supply for 110 to 230 VAC (-15% to +10%)
- Power consumption: max. 15 VA, typically 5 VA
- Mains plug with 2 m lead
- Mains frequency: 50/60 Hz +/- 5 %
- Optional direct feed without integral mains adapter: 10.5 - 18 VDC, ripple < 3 %

## Load cell terminal

- 1 measurement input with max. 8 x 350 - 27 x 1100 Ω
- Minimum permissible total terminal resistance ≥ 40 Ω
- Supply voltage: 5 VDC
- Characteristic value: max. 3.0 mV/V
- Measurement cable: 6-way (shielded)
- Approved according to 2014/31/EU

## Analogue-to-digital converter

- Sensitivity: > 0.3 μV/e
- Conversion time: 20 - 160 ms
- Measurement rate: up to 50 measurements per s
- Internal resolution: approx. 5,000,000
- Settling time: 0.5 - 3 s
- Connection: 6-way system

## Clock

- Battery-buffered clock, battery life approx. 10 years

## Weighing range and scale interval

- Class III :
  - Single range instrument:  $n \leq 10.000 e$
  - Multiple range instrument:  $3 \times n \leq 6.000 e$
  - Multi-interval instrument:  $3 \times n \leq 6.000 e$
- Class IIII : 1.000 e
- Not admissible for verification:  $n \leq 100.000 d$  (limited by load cell)

## Adjustment program

- Adjustment: 2 - 5 user-selectable adjustment points
- g-value correction: via entry of g-value
- Adjustment correction: resettable adjustment points
- Manual input: entry of adjustment points (load and AD value)
- Initial load correction: settable without complete re-adjustment
- Digital filter: user selectable to ambient conditions, with post-conformity assessment optimisation

## Interfaces

- **82b<sup>e</sup>** : 1 RS-232 serial port (standard)
- Transmission rates: (600 - 38.400 Bit/s)
- **82c<sup>e</sup>** : 2 RS-232 serial ports (standard)
- Transmission rates: (600 - 38.400 Bit/s)

## Digital inputs/outputs

- 2 inputs
- **82b<sup>e</sup>** : 1 digital output with max. 2.5 A,
- **82c<sup>e</sup>** : 2 digital outputs with 1 x max. 2.5 A and 1 x max. 0.4 A

## Visual signalling device

- Three colours (red, green, blue)

## Memory

- Tare memory: 1 or 2 tare memories for containers (T1) and weighed product (T2), together max. 100%
- Data memory for 10 weighing sequences/ print tickets (PC configurable only)
- Variables memory: 10 variables 10-digit Alphanumeric entry via scanner or PC.
- Alibi memory for min. 144,000 entries
- **82c<sup>e</sup>** : Statistics memory for one product line
- **82c<sup>e</sup>** : Accumulation memory: 10 memory locations with user numeric name assignment for net, gross, tare 1, tare 2, manual tare and unit quantities, addition counter. Largest possible value and printout: 10-digit

## Option cards (card instead of RS-232 serial port)

### – Ethernet (LAN)

- Ethernet 10/100 MBit
- Alibi memory expansion by additional 144,000 or 432,000 entries

### – Ethernet (WLAN)

- Ethernet 10/100 MBit
- Alibi memory expansion by additional 144,000 or 432,000 entries

### – Profibus

- Profibus DP
- Alibi memory expansion by additional 144,000 or 432,000 entries

### – Analogue output

- Analogue output: Selectable voltage or current output and ranges (0 to 20 mA, 4 to 20 mA, 4 to 24 mA, -10 to +10 V, -5 to +5 V, 0 to 5 V, 0 to 10 V)
- Analogue signal according to gross or net weight or (quantity **82c<sup>e</sup>**)

### – RS-422

- Alibi memory expansion by additional 144,000 or 432,000 entries

## Dimensions

