

# IT1 Blackbox / IT1 JunctionBox



**IT Blackbox / IT JunctionBox  
with Scale Connection and  
Data Interface,  
for Industrial Use**

# IT1 Blackbox / IT1 JunctionBox – Technical Data

## Construction

Compact stainless steel housing protected to IP67 / IP69K, for wall-mount installation, suitable for harsh environments, all cable connections through sealed cable glands.

## Weighing electronics

### IT1 Blackbox:

Connection to scales with analog strain gauge load cells, entry impedance 43 Ohm–3.3 kOhm (e. g. suitable for 8 x 350 Ohm load cells), or zener barriers, entry impedance 87.5 Ohm–3.3 kOhm (e. g. suitable for 4 x 350 Ohm load cells), W&M approved resolution of up to 10,000 d. Internal resolution 524,000 d, update rate 50–800/s, smallest load cell signal 0.33  $\mu$ V/e. Options: Connection of scale platforms with digital force transducers, external scale interface with ADCBox via RS485, max. cable length: 500 m.

### IT1 JunctionBox:

Connection to scales with max. 4 analog strain gauge load cells, incl. shift adjust board AJC for the adjustment via rotary potentiometers, W&M approved resolution of up to 10,000 d. Internal resolution 524,000 d, update rate 50–800/s, smallest load cell signal 0.33  $\mu$ V/e. Calibration as single or multiple range scale with 1, 2 or 3 ranges or as multi-interval scale. Calibration with test weights or through entry of rated output of load cell(s), option for the linearization of the load curve. Calibration with PC software IT CONFIGURATOR (SIM-NET module required).

## Weight display

Über Ethernet-Schnittstelle eichfähig als NSW nur in Kombination mit separatem SysTec-Wägeterminal oder über PC-Software PC ScaleView.

## Electrical connection

110–240 V AC, 50/60 Hz or 12–30 V DC via integrated power supply unit, or 12–30 V DC for power supply via external battery.

## Operating temperature

–10 °C (+14 °F) to +40 °C (+104 °F), 95 % relative humidity, non-condensing.

## Interface options

One socket for serial or Ethernet interface and one socket for digital I/Os or analog output:

**PC interface**, selectable Ethernet, RS232 or RS485-4-Draht, configurable as 'data transmission after each weighing cycle' or 'in request mode'.

**Printer interface**, selectable USB, Ethernet, RS232 or RS485, for the connection of a form or ticket printer, printout configurable via display and keyboard.

**Interface for remote display**, selectable RS232, RS485 or Ethernet, several protocols configurable.

### 2 digital inputs and 2 digital outputs

Optoisolated, 24 V DC, outputs for setpoint monitoring or simple filling applications, inputs for start of weighing and taring or start/stop of filling.

### Additional digital output

Optoisolated, 24 V DC, for +/– check or setpoint monitoring.

### Analog output

0–20 mA, 4–20 mA, 0–10 V or 2–10 V, 15 bit, 32,000 divisions, for analog output of weight.

## Further options

### Internal W&M approved data archive

To record the latest 1,000,000 weighing results.

### PC ScaleView

PC software for the display of weighing data and scale status information.

### PC COM+ / PC ARCHIVE

PC software for W&M approved recording of weighing data on a PC hard disk, recording of several years on a hard disk possible.

### PC ReadIT

PC software for the reception of weighing data and storage in an ASCII file or a database.

### IT CONFIGURATOR

PC software for calibration, backup, configuration of user prompts, and editing of print formats (SIM-NET module required).

### Remote display

W&M approved IT1 remote display, selectable RS232, RS485 or Ethernet interface.

### Remote diagnostics

Via Ethernet/Internet connection with integrated web server.

## Construction:

### IT1 Blackbox




- Stainless steel housing, IP67 / IP69K, NEMA 4X
- Wall-mount installation
- Dimensions W x H x D: 162 x 171 x 64 mm (6.4" x 6.7" x 2.5")


### IT1 JunctionBox



- Stainless steel housing, IP67 / IP69K, NEMA 4X
- Wall-mount installation
- Dimensions W x H x D: 221 x 171 x 64 mm (8.7" x 6.7" x 2.5")

**Directives:** 2014/31/EU, 2014/30/EU, 2014/35/EU

 EU Type-examination Certificate as non-automatic weighing instrument

 ETL certified in accordance with UL 60950-1 and CSA C22.2 No. 60950-1

 Other certificates on demand

**Standards:** EN 45501, OIML R 76-1, EN 61000-6-2, EN 61000-6-3, NAMUR NE21, EN 62368-1, WELMEC 8.8

 NTEP approval as indicating element

 EMI compliance with FCC Part 15

 Measurement Canada: Approval as indicating element

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Sales and service

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