SysTec
Discover smart weighing

ACHTUNG ! WARNING ! ATTENTION !

VOR ÖFFNEN DES GEHÄUSES
NETZSTECKER ZIEHEN !

DISCONNECT ALL POWER TO
THIS UNIT BEFORE SERVICING !

DECONNECTER LE CIRCUIT
AVANT D'OUVRIR !

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 IP65 / IP67 for wall-mount installation. Suitable for harsh environments, including outdoor area and altitudes of up to 5,000 m. 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 µV/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 µV/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

Via Ethernet interface, W&M approval as NAWI only permissible if used in combination with a separate SysTec weighing terminal or with the PC software PC *ScaleView*.

Electrical connection

110–240 V AC, 50–60 Hz or 12–24 V DC via integrated power supply unit, or 12–24 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	IT1 JunctionBox
• Stainless steel housing, IP65 / IP67, 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")	• Stainless steel housing, IP65, 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

Standards: EN 45501, OIML R 76-1, EN 61000-6-2, EN 61000-6-4, NAMUR NE21, EN 62368-1, WELMEC 8.8

CE EU Type-examination Certificate as non-automatic weighing instrument

UKCA Type-examination Certificate as non-automatic weighing instrument

NTEP approval as indicating element

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

FC EMI compliance with FCC Part 15

Measurement Canada: Approval as indicating element

Other certificates on demand