

IT1 Ex2/22

Systemtec
Discover smart weighing



**Universal Weighing Terminal,
W&M Approved,
for Industrial Use
for Installation in Hazardous Area
Zones 2 and 22**

IT1 Ex2/22 – Technical Data

ATEX approval

- II 3G Ex e ic IIC T4 Gc (gas)
II 3D Ex ic tc IIIC T135°C Dc (dust)

Construction

Compact stainless steel housing protected to IP65, for desk-top, wall-mount and column-mount installation or as panel-mount version, suitable for harsh environments, all cable connections through sealed cable glands.

Display and keyboard

Bright 4.3" (11 cm) color screen for indication of weight and operator prompts and calibration.

Sealed membrane keyboard with tactile feedback, with soft keys for zero setting, taring, printing, totalizing and special functions.

Weighing electronics

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 via zener barriers, entry impedance 87.5 Ohm–3.3 kOhm (e.g. suitable for 4 x 350 Ohm load cells), W&M approved resolution 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. Clear operator prompts for all steps of calibration sequence.

Optional interface modules for digital load cells Flintec RC3D or HBM C16i, Mettler-Toledo TBrick, K...).

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-wire, 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.

Ethernet connector

M12 connector (Ex) for the assembly of customized connection cables for hazardous area.

Construction:

Desk-top or wall-mount installation



- Stainless steel housing, IP65, NEMA 4X
- Desk-top installation
- Dimensions W x H x D: 210 x 177 x 115 mm (8.27" x 7" x 4.53")

- Stainless steel housing, IP65, NEMA 4X
- Wall-mount installation
- Dimensions W x H x D: 210 x 151 x 121 mm (8.27" x 5.94" x 4.8")

Panel-mount version



- Stainless steel housing, fascia plate protected to IP65, NEMA 4X
- Panel-mount installation
- Dimensions W x H x D: 182 x 145 x 56 mm (7.2" x 5.7" x 2.2")
- Cut-out in panel: 165 x 129 mm (6.5" x 5.08")

Directives: 2014/30/EU, 2014/31/EU, 2014/32/EU, 2014/34/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, 60079-0/-7/-11/-31



EU Type-examination Certificate as non-automatic weighing instrument



Type-examination Certificate as non-automatic weighing instrument



Other certificates on demand

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Sales and service

Subject to change without notice

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