IT3

Universal Weighing Terminal, W&M Approved, for Industrial Use

IT3 – Universal Industrial Weighing Terminal

Stainless steel housing IP69K
Suitable for harsh environment weighing locations. With mounting brackets for desk-top or wall-mount installation. Integrated power supply unit, sealed cable glands for all cable connections.

Color display
For indication of weight, multi-lingual operator prompts and calibration dialog. With backlighted, 13 cm (5") display.

Keyboard
With function keys for zero setting, taring and printing, numeric keys for the entry of manual tare and IDs. Alphanumeric entries possible via multiple key assignment.

Power supply
110–240 V AC (integrated) for stationary use or 12–30 V DC (integrated) for mobile use.

Universal Use
Suitable for difficult environmental conditions and locations with high hygienic standards, as in the food, pharmaceutical and chemical industry.

High Operational Security
Fast and error-free operation is ensured by a color display for the indication of weight, IDs and operator prompts in combination with an easy-to-use keyboard.

Weighing Electronics
IT3 connects to one or two 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 of up to 10,000 d. Calibration is possible as single or multiple-range (e.g. 3 x 3000 d) and as single or multi-interval scale.

Interface modules for digital load cells are available as options.

Weighing Program
Display of net, tare and gross weight. Operator prompting with entry of up to 20 additional IDs (e.g. order No., customer No., product No., etc). Prompts and length of entries are configurable. Weighing data can be stored in an internal W&M approved data archive. Parts counting and totalizing is also possible.

Plug-on modules are used to set IT3 up for applications of varying complexity.

Data Logging
Via optional printer interface. The print layout for labels or forms is fully configurable. Printout of weights, totals, date, time, stored texts, entered IDs and calculated values.

Data Transmission To PC
Transmission of all entered IDs, date, time and weight after each weighing cycle, data storage on the PC's hard disk.

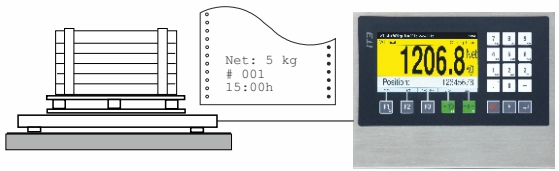
PC ONLINE Mode
Via optional PC interface. Reading of weight, taring, zero setting and other functions can be remotely controlled from a PC. Weights can be stored in a W&M approved data archive in the IT3 or on the PC's hard disk for verification. Data transmission is possible through serial interface or Ethernet LAN.

Switching And Filling
With an optional input/output module two weight thresholds can be monitored, e.g. for max. or min. values. Start of weighing cycle and taring is possible from external switches. Alternatively the inputs and outputs can be used for a filling sequence with start/stop switch.

IT3 – Standard Programs

BASIC

W&M approved weighing terminal
Entry of IDs, e.g. order No. and product No., taring, weighing and totalizing, W&M approved storage of weighing data in data archive, printout of ticket, data transmission to PC.

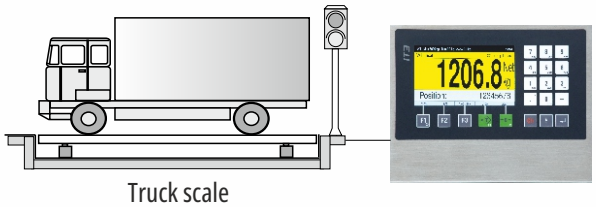


Desk-top or floor scale

Connection to:
printer, PC or remote display

TRUCK

W&M approved truck scale terminal
First and second weighing or single-pass weighing with known tare weight, W&M approved data archive, printing of ticket, traffic light control, data transmission.

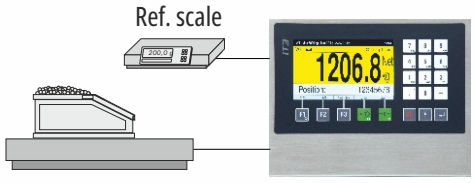


Truck scale

Connection to:
printer, traffic light, PC or remote display

COUNT

Parts counting terminal
Capturing of piece weight via reference scale, parts counting with optimization of piece weight, weigh-in or weigh-out mode, plus / minus display, item counter, memory for totals.

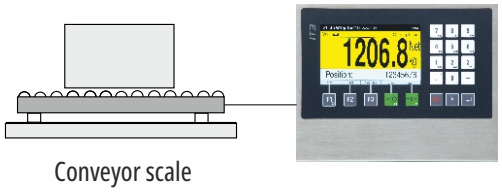


Counting scale

Connection to:
printer and PC

CHECK

Checkweighing terminal
Weight check for incoming goods or filling applications, plus / minus check with output of min. / max. signals.

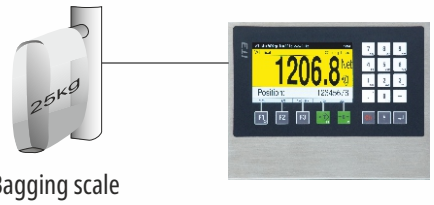


Conveyor scale

Connection to:
relay unit, printer and PC

FILL

Simple filling controller
Filling or discharging in fast and slow speed, with tare check and preact optimization.
Memory for the filling parameters of 9 products.
Inputs for external start / stop signals.

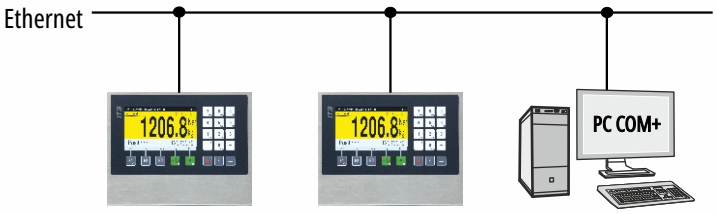


Bagging scale

Connection to:
relay unit or PLC, printer and PC

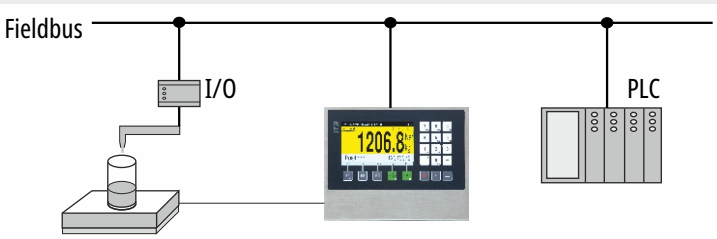
ONLINE

W&M approved ONLINE weighing terminal
Data transmission, taring or zero setting on request from PC. Connection to PC via serial line or Ethernet, W&M approved data archive in IT3 or on PC.



ONLINE OP

W&M approved fieldbus weighing terminal
Capturing of weight and operation data. Filling or discharging controlled by PLC or PC. W&M approved data archive.



IT3 – Technical Data

Display and keyboard

Bright 5" (13 cm) color screen for indication of weight and operator prompts and calibration.

Sealed membrane keyboard with tactile feedback, with numeric keys for the input of tare weights and additional information, scale keys for zero setting and taring and function keys.
Input of alpha characters via multiple assignment of numeric keys.

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. Options: Connection of two scale bases via DADM, connection of scale platforms with digital force transducers, external scale interface with ADCBox via RS485, max. cable length: 500 m. Internal event log for scale errors.

Calibration

Of scales with analog load cells:
Setup 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. Transmission of all calibration data to/from PC with printout.

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), max. 95 % relative humidity, non-condensing.

Interface options

One SIM socket for:

Serial interface to connect a PC, printer, remote display or reference scale via RS232 or RS485 4-wire. Printout configurable with PC tool IT *CONFIGURATOR*.

Ethernet module to connect to TCP/IP networks or a network printer. Remote diagnosis is possible via internet.

USB module to connect a USB printer or keyboard.

DUAL-ISM to connect single- or dual-channel incremental sensors (pulse wheel).

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

One extension socket for:

SIM-ETH3 module providing a second SIM socket.

Fieldbus module for Profinet, Profibus DP or Ethernet/IP.

One socket for digital inputs/outputs or analog output:

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.

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.

Data storage

Power-fail-safe storage of date and time.
Application memory:
BASIC: 9 selectable tare weights,
COUNT: 9 reference weights,
TRUCK: 99 first weights,
FILL: 9 products.

Further options

Internal W&M approved data archive
To record the latest 1,000,000 weighing results.

Interface for two scale bases DADM
To connect two scales with analog strain gauge load cells.

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.

IT *CONFIGURATOR*
PC software for calibration, backup, configuration of user prompts, and editing of print formats.

RTC *Web Interface*
For remote diagnostics via Ethernet/Internet.

Ethernet interface cable
With RJ45 connector, 5 m (20") or 10 m (40").

Splash and dust cover
Transparent plastic cover to protect display and keyboard.

Construction:

Desk / wall version

- Stainless steel housing, IP69K, NEMA 4X
- Suitable for desk-top or wall-mount installation
- Dimensions W x H x D: 228 x 214 x 124 mm (8.9" x 8.4" x 4.9")

Panel-mount version

- Stainless steel housing, fascia plate protected to IP69K, NEMA 4X
- Dimensions W x H x D: 241 x 180 x 47 mm (9.5" x 7.1" x 1.9")
- Cut-out in panel: 223 x 162 mm (8.8" x 6.38")

Directives: 2014/30/EU, 2014/31/EU, 2014/32/EU, 2014/35/EU

Standards: EN 45501, OIML R 76-1, EN 61000-6-2, EN 61000-6-3, NAMUR NE21, EN 62368-1, OIML R 61, WELMEC 8.8

EU Type-examination Certificate as non-automatic weighing instrument, automatic gravimetric filling instrument

NTEP approval as indicating element

ETL certified in accordance with UL 62368-1 and CSA C22.2 No. 62368-1

EMI compliance with FCC Part 15

Measurement Canada: Approval as indicating element

Other certificates on demand

EtherNet/IP

PROFINET® PROFIBUS®

DEM Machines Ltd | Tel +353 45 874 333 | www.demmachines.com | info@demmachines.com