

IT9000E

W&M approved weighing terminal

For challenging weighing and filling applications

Freely programmable industrial weighing terminal

Stainless steel housing IP65

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.

Universal use

The W&M approved IT9000E is designed for demanding industrial applications in the chemical and pharmaceutical industry, in the food industry and in many other sectors of industry.

The industrial design with the powerful modular hardware and the concept of free programmability make the IT9000E the ideal weighing terminal for standard or application-specific solutions, eg for:

- Shipping and receiving
- Batching systems with up to 8 scales
- Manual recipe weighing
- Vehicle/axle weighing
- Mobile data capture systems.

Bright TFT color display

With wide viewing angle, large weight display and 4 to 8 input lines.

Simple and fast operation

With integrated alphanumeric keyboard, function keys and programmable soft keys, optional full-size PC keyboard (cable or bluetooth).

Stationary or mobile use

With integrated 110 - 240 V AC power supply unit or via external 12/24 V DC battery.

Weighing electronics

1 or 2 internal and up to 6 external scale interfaces possible. Adjustable update rate with up to 400 updates/second. Extremely high noise immunity against radio frequency interference. W&M approved resolution of up to 6000d with max. 80% preload. Calibration is possible as single or multiple-range (eg 3 x 3000d) and as multi-interval scale. Internal data archive for the storage of up to 500,000 weighing transactions.



Modular concept

- The modular design provides for a variety of configurations and options, such as:
- Enclosures for wall-mount, desk-top or panel-mount installation or as blackbox
 - DC or AC power supply
 - Connection of scales with analog or digital force transducers
 - 10/100 Mbps Ethernet interface with integrated web server, WLAN as option
 - Integrated USB 2.0 host interface for printer, scanner and USB stick
 - Up to 6 serial interfaces, RS232, RS485, RS422, 20 mA CL selectable
 - Flexible I/O concept for up to 64 inputs and outputs
 - Several fieldbus interfaces, eg Profibus DP, DeviceNet or CAN
 - Analog I/Os, etc.

This ensures that the optimal system configuration can be chosen, for stationary as well as mobile use.

Free programmability

Standard programs can be adapted to the requirements of specific applications. New programs can be designed and tested in a very simple way on a PC with the RTC program development environment.

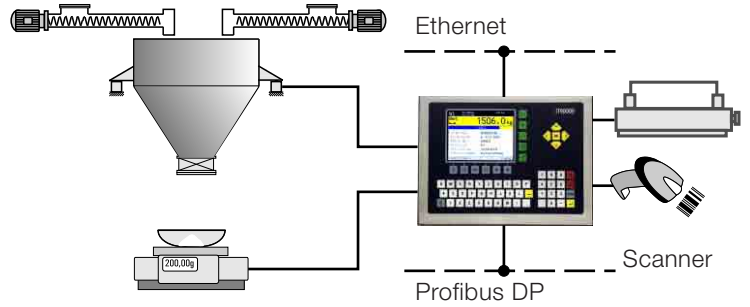
Simple integration

The Linux based operating system with the integrated web server provides the ideal functionality for the integration of the IT9000E into local area networks. WLAN communication and remote access via internet are also possible.

IT9000E - application examples

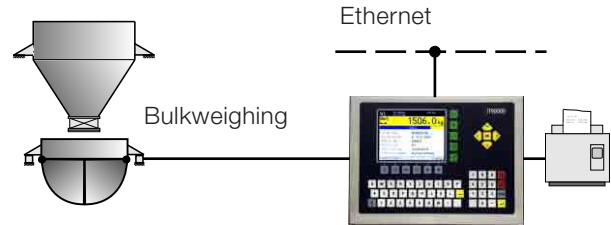
Batch – Automatic batching system

With up to 8 scales, management of raw materials and recipes, fast and accurate multi-component two-speed batching, with preact optimization, or manual batching with bargraph display and indication of remaining quantity, control of process steps via Profibus DP or DeviceNet, printing of batch protocol, material statistics, optional download of recipes over network, storage of batch results in the network.



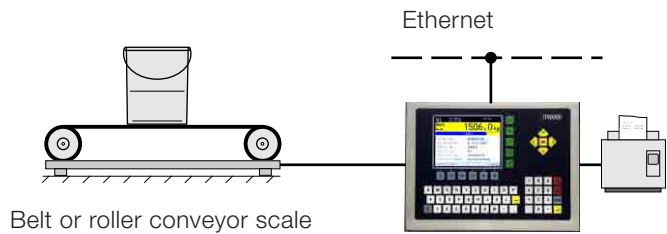
Bulk – Bulkweighing controller

For shipping and receiving of bulk material via trucks, freight cars or ships; with product files and control of silos, remote control possible via fieldbus, e.g. Profibus DP.



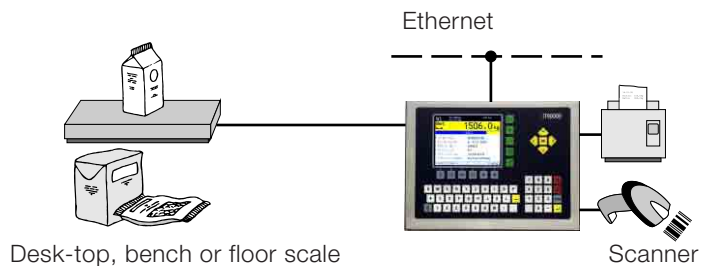
Check – Checkweighing scale

Fast capturing of weights from scales with belt or roller conveyors, in continuous or start/stop operation, classification in 5 tolerance zones, control of rejecters or pushers possible, optional connection to printer for price labeling, with product and statistics file.



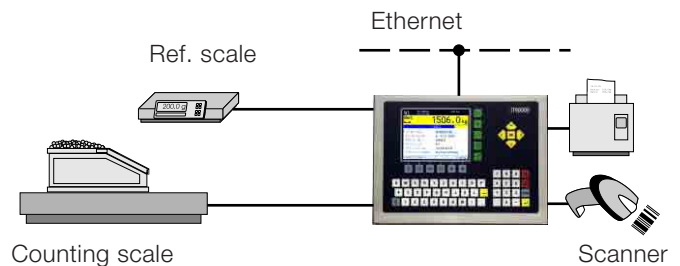
SQC – Sample scale in compliance with the regulations for prepackaged goods

Capturing and printout of statistical data for 250 products on 20 production lines, check by weight or volume, with entry of additional IDs.



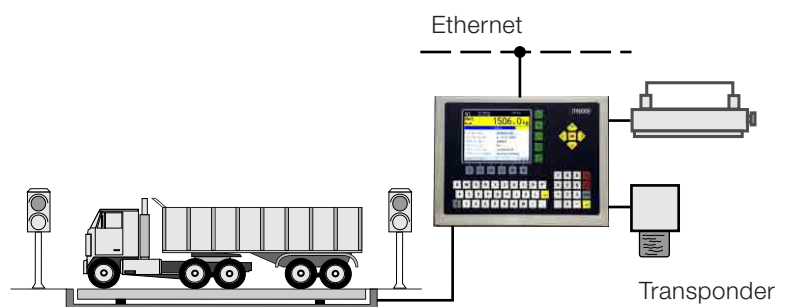
Count – Parts counting terminal

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.



Truck/Online – W&M approved vehicle scale

First, second and single-pass weighing, file management for customer, supplier and product data, internal W&M approved data archive, configurable print format, switching/summing function for platforms, optional connection of transponder card readers, remote displays, traffic lights and full-size PC keyboard.



Detailed data sheets are available for the individual products

IT9000E – Technical data

Construction and options

Desk/wall version



- Stainless steel housing, IP65
- For desk-top or wall-mount installation or with optional column for floor mounting
- Dimensions W x H x D: 376 x 265 x 140 mm

Panel-mount version

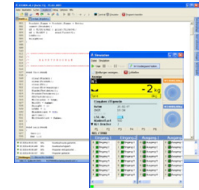


- Stainless steel housing, IP65
- Panel-mount installation
- Dimensions W x H x D: 376 x 230 x 184 mm
- Cut-out in panel: 313 x 233 mm

WLAN



RTC WIN



Weighing electronics

For the connection of 1 or 2 scale platforms with a max. of 16 analog load cells in 4- or 6-wire technique, W&M approved resolution 6000d, at a max. of 80% preload, internal resolution 524,000d, update rate selectable 50 - 400 updates/second, smallest load cell signal 0.33 $\mu\text{V}/\text{e}$.

Option: connection of scale platforms with digital force transducers.

Option: up to 6 external scale connections.

Calibration

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 with up to 6 linearization points. Option to connect incline switch.

Electrical connection

115 (–15%) to 240 (+10%) V AC, 50/60 Hz via integrated power supply, option: 12 – 30 V DC, power consumption max. 20 VA.

Operating temperature

–10 °C to +40 °C, 95% relative humidity, non-condensing.

Display and keyboard

Bright, high-contrast 5.7" TFT color display, 320 x 240 pixel, with wide viewing angle, large weight display and 4 to 8 input lines. Programmable soft keys, alphanumeric keyboard, function keys for zero setting and taring, plus application-specific function keys, connection of optional full-size keyboard via USB (cable or bluetooth).

Serial interfaces

Up to 6 interfaces, selectable RS232, 20 mA CL, RS422 or RS485 for printer, precision scales, remote displays, other peripheral devices and host communication.

Parallel and analog I/Os

16 internal optoisolated inputs and outputs, 24 V DC, or external relay/transistor module (64 inputs, 64 outputs max.). Internal 15-bit analog output, external module for up to 4 analog inputs /outputs as option.

Fieldbus interfaces

Profibus DP 12 Mbps, DeviceNet or CAN.

Ethernet interface

10/100BASE-T Ethernet interface with integrated web server, WLAN as option.

USB

USB 2.0 host interface with optional IP67 connector.

Security

Powerfail safe storage of data, password protection, battery-backed realtime clock, remote diagnosis over Ethernet/internet possible.

CPU/operating system

32-bit ARM processor, 520 MHz, 2 MB data memory, expandable. Linux based realtime multitasking operating system.

Free programmability

Comprehensive, PC-based program development and test environment. Programming with RTC WIN program generator or C code in compliance with WELMEC software guidelines. Complete software development and test/simulation possible on PC.

Options

RTC WIN

IT9000E programming environment.

PC COM+

Active X component for the communication with PC programs.

Certifications

- Directives: 2009/23/EC, 2004/108/EC, 2006/95/EC, 2004/22/EC
- Standards: EN 45501, OIML R76-1, EN 61000-6-2, EN 61000-6-3, NAMUR NE21, EN 60950, OIML R51, OIML R61, OIML R107
- EC-approval as non-automatic weighing instrument, MID-approval as AGFI, checkweigher, automatic catchweighing instrument, weigh labeler, weigh-price labeler, discontinuous totalizer
- NTEP-approval as non automatic weighing instrument and Bulkweigher for grain and general purpose
- ETL-certified in accordance with UL 60950-1 and CSA C22.2 no. 60950-1
- EMI compliance with FCC Part 15
- Mesures Canada: Approval as non-automatic weighing instrument
- Russia: Approval as non-automatic weighing instrument, AGFI, automatic catchweighing instrument, discontinuous totalizer
- Ukraine: Approval as non-automatic weighing instrument, AGFI, automatic catchweighing instrument, discontinuous totalizer

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