

IT8000E



W&M Approved Weighing Terminal
For Challenging Weighing And Filling Applications

IT8000E - 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.

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 - 240VAC power supply unit or via external 12/24VDC battery.

Universal use

The W&M approved IT8000E 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 IT8000E the ideal weighing terminal for standard or application-specific solutions, eg for:

- Shipping and receiving
- Filling and batching systems
- Totalizing bulkweighers
- Checkweighers
- Vehicle / axle weighing
- Mobile data capture systems.

Weighing electronics

1 or 2 internal and up to 6 external scale interfaces possible. Adjustable update rate with up to 800 updates / second. High noise immunity of min. 10V/m 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 3x3000d) and as multi-interval scale. Internal data archive for the storage of up to 120,000 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 4 serial interfaces, RS232, RS485, RS422, 20mA CL selectable
- Flexible I/O concept for up to 64 inputs and outputs
- Fieldbus interfaces Profibus DP or Modbus TCP
- 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.

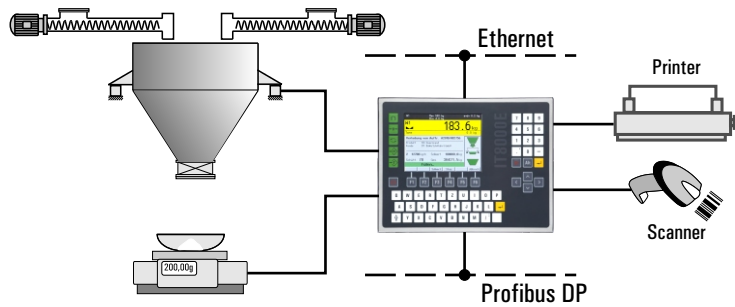
Simple integration

The Linux based operating system with the integrated web server provides the ideal functionality for the integration of the IT8000E into local area networks.

WLAN communication and remote access via internet are also possible.

IT8000E - Standard Programs (Examples)

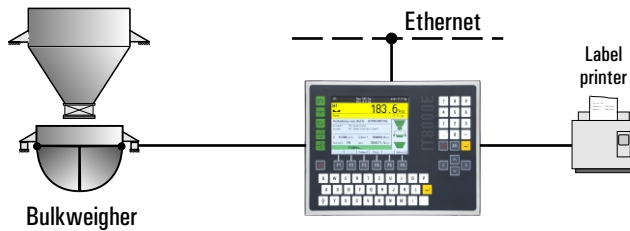
BATCH



Automatic and manual 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 I/Os or Profibus DP), printing of batch protocol, material statistics, optional download of recipes over network, storage of batch results in the network.

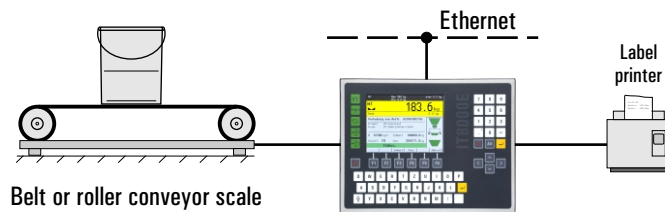
BULK



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 (eg Profibus DP).

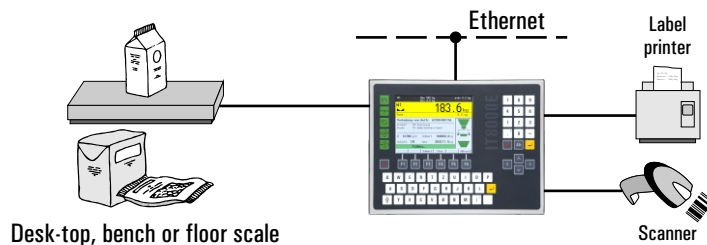
CHECK



Checkweighing scale

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

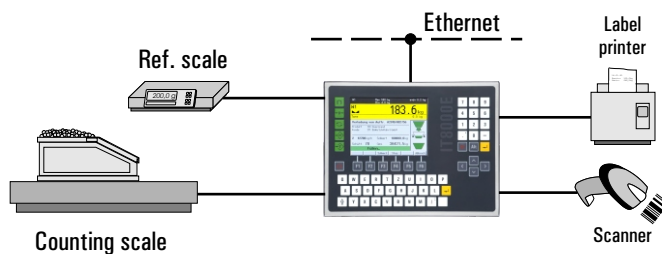
SQC



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.

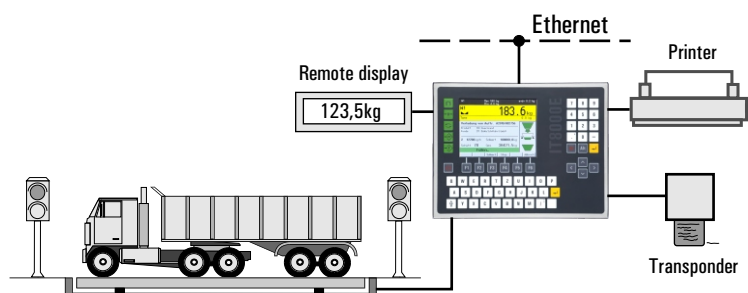
BASIC/COUNT



Parts counting terminal

Capturing of piece weight via reference scale, parts counting in weigh-in or weigh-out mode, bargraph display, configurable printout and data transmission, with article file, item counter, memory for totals, automatic taring, plus/minus check and many more functions.

TRUCK/ONLINE



W&M approved vehicle scale

First, second and single-pass weighing, file management for address 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.

IT8000E - Technical Data

Weighing electronics

For the connection of 1 or 2 scale platforms with a max. of 16 analog loadcells in 4- or 6-wire mode, W&M approved resolution of up to 6000d at a max. of 80% preload, internal resolution 524,000d, update rate selectable 50 - 800 updates / second, smallest loadcell signal 0.33µV/e. Optional switching and summing function.

Option: connection of scale platforms with digital force transducers.

Option: up to 6 external scale interfaces via ADCBox.

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 loadcell(s), option for the linearization of the load curve with up to 6 linearization points. Option to connect incline switch.

Electrical connection

110 (-15%) to 240 (+10%)VAC, 50/60Hz via integrated power supply, option: 12 - 30VDC, power consumption max. 20VA.

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 4 interfaces, selectable RS232, 20mA CL (passive), RS422 or RS485 for printer, precision scales, remote displays, other peripheral devices and host communication.

Parallel and analog I/Os

Up to 8 internal optoisolated inputs and outputs, 24VDC, 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 12Mbps or Modbus TCP.

Ethernet interface

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

USB

USB 2.0 host interface with optional IP65 connector for PC keyboard, scanner or USB stick.

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, 266MHz, 1.5MB data memory, expandable. Linux based realtime multitasking operating system.

Free programmability

Comprehensive, PC-based program development and test environment. Programming with RTC *W/V* in 'C' in compliance with WELMEC software guidelines. Complete software development and test / simulation possible on PC.

Options

RTC *W/V*

IT8000E programming environment.

PC *COM+*

Active X component for the communication with PC programs.

Construction/options:

Desk/wall version



- Stainless steel housing, IP65
- for desk-top or wall-mount installation or with optional column for floor mounting
- Dimension WxHxD: 330x229x134mm

Panel-mount version



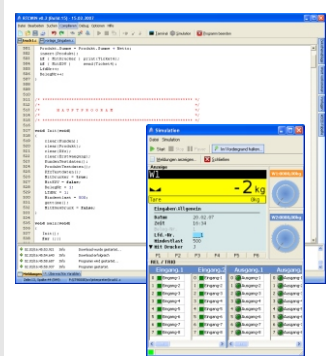
- Stainless steel housing fascia plate protected to IP65
- Panel-mount installation
- Dimension WxHxD: 285x224x69mm
- Cutout in panel: 268x207mm

WLAN



- Option: WLU module to connect to WLAN networks (802.11b/g)
- Secure encryption selectable

RTC *W/V*



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 in preparation



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



EMI compliance with FCC Part 15