IT8000
Universal weighing terminal
For industrial use W&M approved

Stainless steel housing IP65
Suitable for harsh environment weighing locations. With mounting brackets for desktop or wall-mount installation. Integrated power supply unit, sealed cable glands for all cable connections.

Universal use
Industrial design, modular concept, proven standard programs and free programmability make the IT8000 the ideal weighing terminal for:
– shipping and receiving scales
– batching and recipe weighing systems
– crane and silo scales
– filling controllers for drums or IBCs
– weighing installations with customized operating sequences.

LCD Dual-line display with back lighting
Up to 4 x 20 alphanumeric characters, multi-lingual operator prompts and calibration dialog.

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. Application-specific functions directly accessible via function keys.

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

Weighing electronics
For the connection of 1 or 2 scale platforms with a max. of 16 analog load cells the IT8000 provides a 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 single or multi-interval scale. Internal data archive for the storage of up to 450,000 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
– DC or AC power supply
– Connection of scales with analog or digital force transducers
– Up to 4 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 and Interbus
– Ethernet interface
– Analog I/Os, etc.

This ensures that the optimal system configuration can be chosen, for stationary as well as mobile use. Specific software modules support the connection of PCs, PLCs, scanners, transponder systems, printers, frequency inverters and wireless communication.

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

High operational security
Fast and error-free operation is ensured by a high-contrast alphanumeric back-lit LCD for the indication of weight, IDs and operator prompts in combination with an easy-to-use tactile keyboard for the entry of manual tare and additional data.

Power and productivity
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ABB

IT8000 – Standard programs

Truck/Online – W&M approved truck scale terminal

Files for customer, supplier and product data; internal W&M approved data archive; configurable print format; switching/summing function for combined platforms; full remote control from PC.
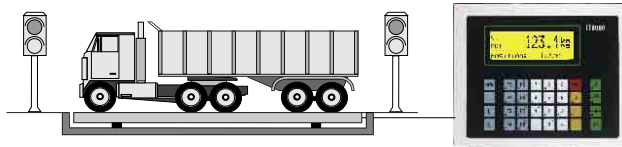
Scale with switching/summing function

Connection to: printer, PC (serially or via Ethernet), transponder system, remote display, traffic lights, etc.

Fill – Filling controller for liquids

Operation as automatic or non-automatic weighing instrument, fast/slow feeding with preact optimization, files for products and statistics, control of filling lance and conveyor.

Scale to fill drums, pails, cans or hobbocks
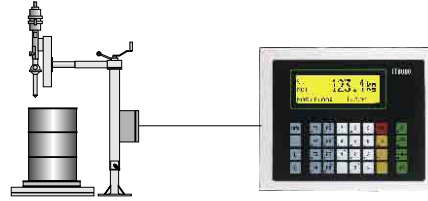
Connection to: fieldbus (e.g. Profibus DP), label printer, PC, etc.

Bigbag – Filling controller for IBCs

With two-speed filling and preact optimization, files for product parameters and statistics, control of inflation, compression and aeration equipment, filltime check, optional fieldbus interface.

Scale integrated in IBC filling structure
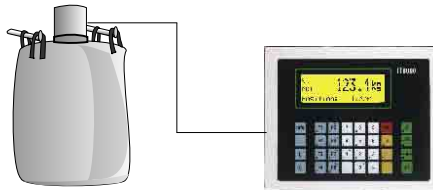
Connection to: motor control center (internal PLC software optional), fieldbus, Ethernet, printer, etc.

Batch – Multi-material batchweighing controller

With files for raw materials and recipes, automatic two-speed or manual batching, synchronization steps for process control, batch protocol and material statistics.

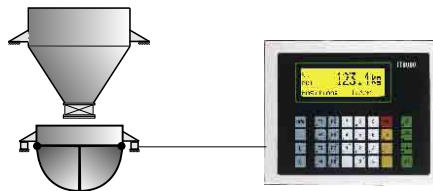Batching of liquid or solid material
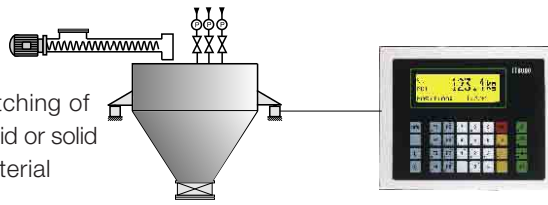
Connection to: fieldbus (e.g. Profibus DP), process control system, printer, scanner, etc.

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.
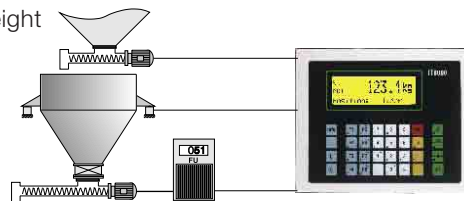
Bulkweigher

Connection to: motor control center or PLC, fieldbus, Ethernet, printer, remote display, etc.

Flow control – Loss-in-weight controller

Continuous discharging from weigh hopper for the feeding into mixers or extruders, control of screw or vibratory feeder or adjustable valve via frequency inverter, with PID controller.
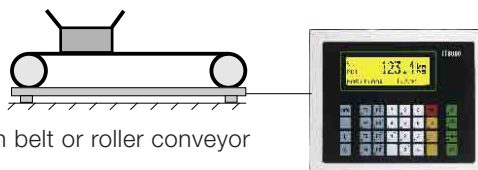
Loss-in-weight feeder

Connection to: frequency inverters (SIEMENS, Danfoss, KEB, Lenze, and others), fieldbus, printer, etc.

Check – Checkweighing terminal for piece goods

Checkscale with belt or roller conveyors, operation in dynamic or start/stop mode, 5 tolerance zones, files for products and statistics.
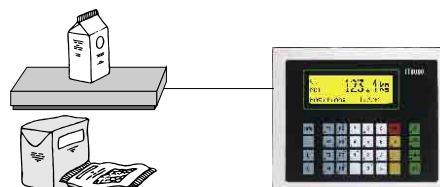
Scale with belt or roller conveyor

Connection to: light barriers, rejecter, scanner, PLC or fieldbus, printer, etc.

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

Capturing and printout of statistical data for 200 products on 20 production lines, check by weight or volume, with entry of additional IDs.

Desk-top, bench or floor scale

Connection to: printer, scanner, PC, etc.

Weighing terminal IT8000 | ABB

IT8000 – Technical data

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, 50 updates per second, input signal 0.33 µV/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. Clear operator prompts for all steps of calibration sequence.

Electrical connection
110 (–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
4 x 20-character alphanumeric back-lit LCD display, height of characters for weight indication 19 mm, operator prompts and calibration via 20-character text display.

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. Optional connection of PC keyboard.

Serial interfaces
Up to 4 interfaces, selectable RS232, 20 mA CL, RS422 or RS485, for printer, host communication, precision scales and other peripheral devices, protocols for PC, printer and remote display configurable.

Parallel I/Os
4 internal optoisolated inputs and outputs, 24 V DC, or external relay/transistor module (64 inputs, 64 outputs max.)

Internal analog output
(resolution 15 bit; 32,768 steps) or external module for 4 analog inputs/outputs (resolution 12 bit; 4096 steps).

Construction

Desk/wall version

– Stainless steel housing, IP65
– Available for desk-top or wall-mount installation or with optional column for floor mounting
– Dimensions W x H x D: 260 x 210 x 135 mm

Panel-mount version

– Stainless steel housing, fascia plate protected to IP65
– Panel-mount installation
– Dimensions W x H x D: 260 x 215 x 70 mm
– Cut-out in panel: 243 x 198 mm

Fieldbus interfaces
Fieldbus interface Profibus DP, alternatively Interbus, DeviceNet or Modbus (RTU).

Ethernet connection
Via internal Ethernet interface as option.

Security
Powerfail safe storage of data, password protection, battery-backed realtime clock, remote diagnosis.

Free programmability
Comprehensive, PC-based RTG WIN program development and test environment including program generator (CASE tool), Pascal and PLC instruction lists.

Options
W&M approved data archive on PC
Storage of weighing data on the PC's harddisk, longterm archiving possible over several years.

Backup & Restore
Software to backup data on PC.

PC COM+
ActiveX component for PC connection.

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

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 catch-weighing 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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