

IT8000EX



**Universal Weighing Terminal,
W&M Approved, for Industrial
Use in Ex Area**

IT8000Ex - Freely programmable industrial weighing terminal

Stainless steel housing IP65

Suitable for harsh environment. With mounting brackets for desk-top or wall-mount installation. All cables connected through tight cable glands.

LCD text display

For weight, multi-lingual operator prompts and calibration. With backlighting, up to four lines of alphanumeric display with up to 20 characters each.



Keyboard

Function keys for zero setting, taring and printing.
Numeric keypad for input of tare weights and IDs.
Alphanumeric entries possible via multiple key assignment.
Application-specific functions directly accessible via function keys.

Power supply

24VDC Ex"e"
via external power supply unit

Universal use

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

Weighing electronics

Scale interface for one scale base with up to 4 loadcells with an impedance of 350 Ohm each or 8 loadcells with 1000 Ohm. Weights and Measures approved resolution of 6,000d with a maximum preload of 80%. Calibration is possible as single or multiple-range scale (eg 3x 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 several configurations with:

- Up to 2 serial, intrinsically safe interfaces for the connection of printer, PC, PLC, remote display, scanner or fieldbus / Ethernet gateway;
- Flexible I/O concept with 4 digital inputs (5V, intrinsically safe) and several options for digital outputs:
5VDC, intrinsically safe to connect piezo-electric valves or potential-free relay contacts to connect intrinsically safe 24V solenoid valves.

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 and frequency inverters in safe area.

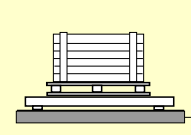
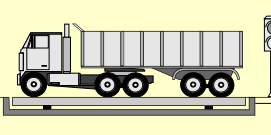
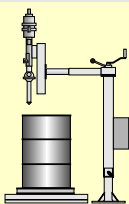

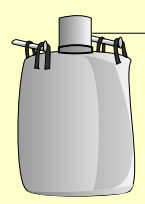
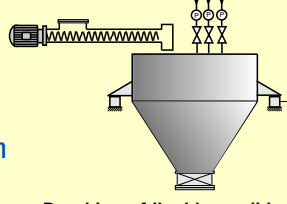
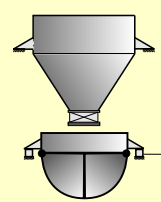
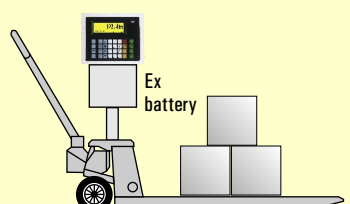
Free programmability

Standard programs can be adapted to the requirements of a specific application. 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.

IT8000Ex - Standard programs (Selection)

BASIC	<p>W&M approved weighing terminal Input of IDs. eg order-No. and article-No., taring, weighing and totalizing, approved data archive, printout on form or ticket, data transmission to PC.</p>	 <p>Floor or bench scale</p>	<p>Ex zone Safe area</p> <p>24VDC</p> <p>RS485 Ex"i" Printer</p> <p>RS485 Ex"i" Separating module RS232 PC</p>
TRUCK/ONLINE	<p>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.</p>	 <p>Single or combined platform</p>	<p>Ex zone Safe area</p> <p>24VDC</p> <p>RS485 Ex"i" Printer</p> <p>RS485 Ex"i" Separating module Ethernet Ethernet converter PC</p>
FILL	<p>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.</p>	 <p>Scale to fill drums, pails, cans or hoppers</p>	<p>Ex zone Safe area</p> <p>24VDC</p> <p>RS485 Ex"i" Printer</p> <p>RS485 Ex"i" Separating module Profibus DP Profibus converter PLC</p>
BAG	<p>Filling controller for bags With two-speed filling and preact optimization, files for product parameters and statistics, filling in gross or net mode, operation as automatic or non-automatic weighing instrument.</p>	 <p>Bagging scale</p>	<p>Ex zone Safe area</p> <p>24VDC</p> <p>RS485 Ex"i" Printer</p> <p>RS485 Ex"i" Separating module Remote display (123,5kg)</p>
BIGBAG	<p>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.</p>	 <p>Scale integrated in IBC filling structure</p>	<p>Ex zone Safe area</p> <p>24VDC</p> <p>RS485 Ex"i" Printer</p> <p>RS485 Ex"i" Separating module Relay modules</p>
BATCH	<p>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.</p>	 <p>Batching of liquid or solid material</p>	<p>Ex zone Safe area</p> <p>24VDC</p> <p>RS485 Ex"i" Printer</p> <p>RS485 Ex"i" Separating module Profibus DP Profibus converter PLC</p>
BULK	<p>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).</p>	 <p>Bulkweigher</p>	<p>Ex zone Safe area</p> <p>24VDC</p> <p>RS485 Ex"i" Printer</p> <p>RS485 Ex"i" Separating module Relay modules</p>
IT8000Ex	<p>Weighing terminal with power supply via rechargeable Ex battery.</p>	 <p>Ex battery</p>	<p>Ex zone Safe area</p> <p>12VDC Battery charger 230VAC</p>

IT8000Ex - Technical data

ATEX approval

⊕ II 2 (2) G Ex e mb ib [ib] IIC T4 (Gas)

Construction

Stainless steel housing with mounting brackets for desk-top, wall-mount or panel-mount installation.

Display and keyboard

4x20-character alphanumeric back-lit LCD display, height of characters for weight indication 19mm, operator prompts and calibration via 20-character text display.

Keyboard 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 keys.

Weighing electronics

For the connection of loadcells with an impedance ≥ 87.5 Ohm, e.g. 4x350 Ohm. W&M approved resolution 6000d, internal resolution 524,000d, input signal 0.33µV/e.

Calibration

Setup as single or multiple range scale or as multi-interval scale. Calibration with test weights or through entry of rated signal, option for linearization.

Power supply

Options:

- external 24 VDC power supply unit for installation in safe area,
- external 230VAC / 24VDC Ex PSU or
- external 12VDC rechargeable Ex battery.

Operating temperature

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

Interfaces

- 4 digital inputs (5VDC, intrinsically safe),
- as option 4 digital outputs (5V, intrinsically safe or potential free relay contacts for connection to intrinsically safe 24V solenoid valves),
- as option 2 serial interfaces, intrinsically safe, for connection to interface separation module.

Interfac separation module

Selectable RS232 or RS485 interface; power supply optional 110–240VAC or 24VDC.

ATEX approval:

⊕ II (2) GD [EEx ib] IIC/IIB

Free programmability

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

Option fieldbus / Ethernet

Connection to Profibus DP, DeviceNet or Ethernet possible via external converters, installed in safe area

Further options

- Ex loadcell cable,
- Ex data cable,
- Ex loadcell junction box (ATEX Ex II 2G EEx ia/ib IIC T6).

Dimensions and accessories:

Desk / wall version	Panel-mount version	24VDC-Ex PSU
 Dimensions WxHxD: 270x210x170mm	 Dimensions WxHxD: 300x240x79mm Cut-out in panel: 273x213mm	 Dimensions WxHxD: 250x232x101mm Optionally available for installation on DIN rail
230VAC-Ex PSU	Ex battery, charger	Interface sep. module
 Dimensions WxHxD: 150x150x130mm	 Dimensions WxHxD: 260x225x105mm	 Dimensions WxHxD: 250x232x101mm

Directives: 90/384/EEC, 2004/108/EC, 2004/22/EC, 94/9/EC

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Standards: EN45501, OIML R76-1, EN 61000-6-2, EN 61000-6-4, NAMUR NE21, OIML R51, OIML R61, OIML R107, EN 60079-0, EN 60079-7, EN 60079-11, EN 60079-18



EC-approval as non-automatic weighing instrument, MID-approval as automatic gravimetric instrument, checkweigher, automatic catchweighing instrument, weigh labeler, weigh-price labeler, discontinuous totalizer



ATEX-approval for Ex-Zone 1 and 2

Sales and service

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Subject
to change
without notice