

IT3000Ex



**W&M Approved
Industrial Weighing Terminal
for Use in
Ex-Zones 1, 2, 21 and 22**

IT3000Ex - Universal Use in Ex-Zone 1, 2, 21 and 22

Stainless Steel Housing IP65

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

LCD Text Display

For weight, operator prompts and calibration.

With backlighting, height of characters 14mm.



Keyboard

Numeric keyboard with multiple assignment for alphanumeric entries. On/off key, keys for printing, taring and special functions.

Power Supply

230VAC Ex"e",
24VDC Ex"e" via external power supply unit or 12VDC Ex battery.

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 backlit, high-contrast LCD, in combination with an easy-to-use keyboard.

Weighing Electronics

IT3000Ex connects to one scale, with -for instance- 4 off 350 Ohm loadcells or 8 off 1000 Ohm loadcells. W&M approved resolution is 6000d with max. 90% preload. Calibration is possible as single or multiple-range (e.g. 3x3000d) and as single or multi-interval scale.

Weighing Program

Display of net, tare and gross weight. Operator prompting for the capturing of weight and IDs. Two setpoints can be monitored via the integrated intrinsically safe outputs. Start and taring is possible from external pushbuttons. As an option, the internal I/Os can be used for a filling sequence with start / stop function.

Data Transmission / Printing

Weighing data are transmitted via the intrinsically safe serial interface (option) to an interface module in safe area. Date, time, consecutive-No., weight and entered IDs are captured. The format of the printout is configurable.

ONLINE Mode

In ONLINE mode the weighing terminal can be remotely controlled from a PC. Reading of weight, taring, zero setting, operator inputs and reading/setting of inputs and outputs is possible from the PC.

ExtensionBox

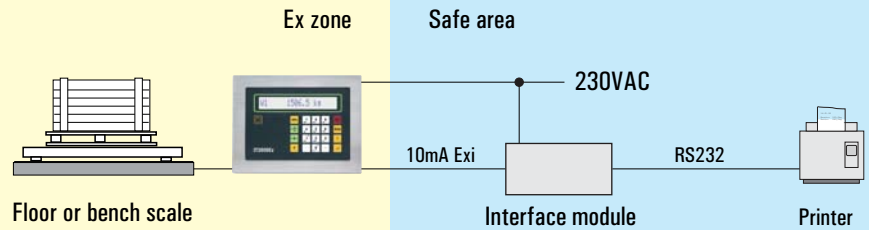
The external ExtensionBox in safe area considerably enhances the versatility of the IT3000Ex.

The freely programmable ExtensionBox permits the use of programs for weighing and filling applications and provides multiple interface options in safe area, eg Profibus DP, Ethernet, 3 serial interfaces and up to 64 transistor or relay outputs.

IT3000Ex - Application Examples

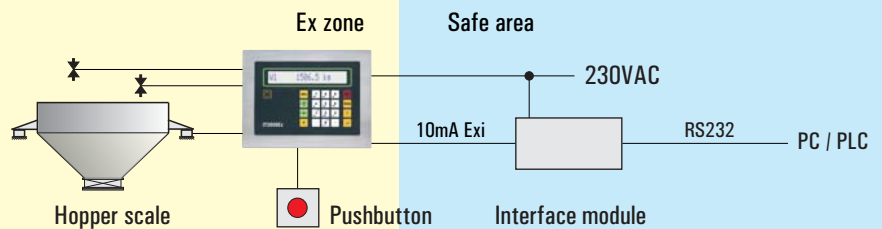
W&M approved scale in Ex area

Manual or automatic taring, weighing and totalizing, configurable printout.



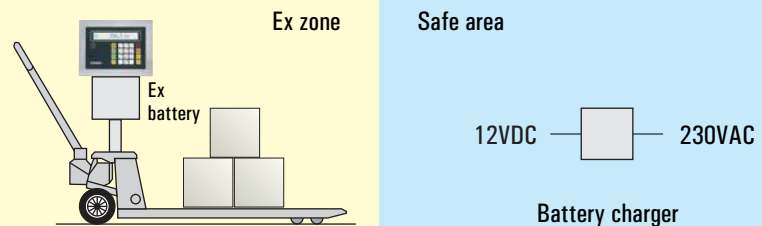
ONLINE operation in Ex area

Weight capturing, taring, zero setting, reading of inputs and setting of outputs via ONLINE interface.



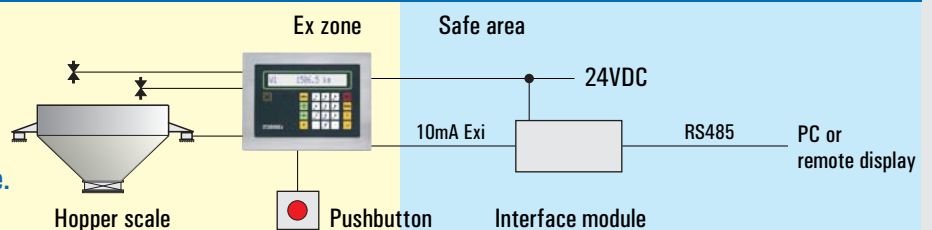
Mobile weighing in Ex area

Weighing terminal with power supply via Ex battery. Operating time 50-100h with fully charged battery.



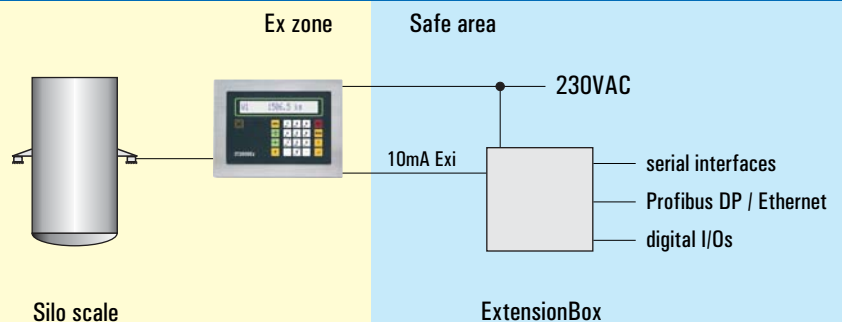
W&M approved filling in Ex area

Filling fast / slow via piezo-electric valves, directly connected to IT3000Ex. Start / stop via external pushbuttons. Data transmission to PC through interface module.



Universal applications with freely programmable ExtensionBox

Free programmability to customize program sequence and operation. Connection to PLC and higher level control system via Profibus DP, Ethernet or serial interface.



IT3000Ex - Technical Data

ATEX Approval

II 2(2)G Ex e ib mb [ib] IIC T4 Gb (Gas)
II 2(2)D Ex ib tb [ib] IIIC T125°C Db IP65 (Dust)

Construction

Stainless steel housing, IP65, with brackets for desk-top or wall-mount installation.

Display And Keyboard

High-contrast 20-character backlit LCD, height of characters 14mm. Numeric membrane keyboard with multiple key assignment for alpha characters. Function keys for on / off, zero setting, taring, printing.

Weighing Electronics

Connection of loadcell(s) with a minimum impedance of 87.5 Ohm, eg 4x350 Ohm. W&M approved resolution of 6000d, internal resolution 524,000d, smallest loadcell signal 0.33µV/e.

Calibration

Setup as single or multiple-range scale or as multi-interval scale. Calibration with test weight or digitally through entry of rated output signal of loadcell(s). Option to linearize weight curve.

Electrical Connection

Power supply options:

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

Operating Temperature

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

Interfaces

2 intrinsically safe digital inputs (5V) and 2 intrinsically safe digital outputs to connect piezo-electric valves (5V).

Option for 1 plug-on intrinsically safe serial interface, 10mA Exi, to connect printer, PC or remote display via the SysTec interface module.

Interface Separation Module

Can be fitted with RS232, 20mA CL or RS485 interface drivers. Power supply selectable, 110–240VAC or 24VDC.

ATEX approval:

II (2)G [Ex ib Gb] IIC (Gas)
II (2)D [Ex ib Db] IIIC (Dust)

Option ExtensionBox

Includes freely programmable CPU8000, with max. 3 serial interfaces, max. 64 digital inputs / outputs, Profibus DP and Ethernet option. Power supply selectable, 110–240VAC or 24VDC.







Option IT3000Ex FILL

IT3000Ex application package (EPROM) for drum filling (above / below level filling), for connection to external relay module (8 I/Os) installed in safe area.

Other Options

- Ex loadcell cable,
- Ex data cable,
- Ex loadcell junction box
ATEX II 2 (2) G Ex ib [ib] IIC T4 Gb (Gas)
II 2 (2) D Ex ib [ib] IIIC T50°C Db (Dust)
II 3G Ex nA IIC T4 Gc (Dust)
II 3D Ex tc IIIC T50°C Dc (Dust),
- Ex laser scanner with I/S power supply to connect to ExtensionBox.

Dimensions and accessories:

Desk / wall version	Panel-mount version	Ex battery, charger
 <ul style="list-style-type: none">• Stainless steel housing, IP65• Suitable for desk-top or wall-mount installation• Dimensions WxHxD: 252x190x154mm	 <ul style="list-style-type: none">• Stainless steel housing, fascia plate protected to IP65• Panel-mount installation• Dimensions WxHxD: 282x220x96mm• Cut-out in panel: 255x193mm	 <p>Dimensions WxHxD: 275x225x116mm</p>
Interface module	ExtensionBox	JunctionBox Ex
 <p>Dimensions WxHxD: 230x47x165mm</p>	 <p>Dimensions WxHxD: 400x242x121mm</p>	 <p>Dimensions WxHxD: 227x80x53mm</p>

Directives: 2009/23/EC, 2004/108/EC,
2006/95/EC, 94/9/EC

 EC approval as non-automatic
weighing instrument

Standards: EN 45501, OIML R76-1,
EN 61000-6-2, NAMUR NE21,
EN 60950, EN 61000-6-4,
IEC 60079-0, EN 60079-7,
EN 60079-11, EN 60079-18,
EN 60079-31, EN 55011

 ATEX approval for
Ex zone 1, 2, 21 and 22

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