Type IT8000E W & M Approved Weighing Terminal
For challenging Weighing and Filling Applications

<table>
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<th>Feature</th>
<th>Specification</th>
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<td>Stainless steel housing IP69K</td>
<td>W &amp; M approved – 6000d single or multiple range</td>
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<td>Panel, wall or desk mountable</td>
<td>Bright TFT colour display with wide viewing angle</td>
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<tr>
<td>110 – 240 VAC integrated power supply</td>
<td>Flexible I/O concept for up 64 inputs and outputs</td>
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<td>Optional external 12 – 24 VDC battery</td>
<td>Fieldbus interfaces Ethernet/IP, Profibus DP, Profinet, or Modbus TCP</td>
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The W & M approved IT8000E is designed for 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, e.g. for:

- Shipping and receiving
- Filling and batching systems
- Totalising bulkweighers
- Checkweighers
- Vehicle / axle weighing
- Mobile data capture systems
Stainless steel housing IP69K
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.

Simple and fast operation
With integrated alphanumeric keyboard, function keys and programmable soft keys, optional full-size PC keyboard (cable or Bluetooth)

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. 10 V/m against radio frequency interference. W & M approved resolution of up to 6000 d with max. 80% preload. Calibration is possible as single or multiple range (e.g. 3 x 3000 d) 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 analogue or digital force transducers.
- 10/100 Mbit 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 or 20mA CL, selectable.
- Flexible I/O concept for up to 64 inputs and outputs.
- Fieldbus interfaces Ethernet/IP, Profibus DP, Profinet or Modbus TCP.
- Analogue I/Os, etc.

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

Free programmability
Standard programmes can be adapted to the requirements of specific application.

New programmes can be designed and tested in a very simple way on a PC with the RTC programme 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.
Procon Engineering
(A Division of National Oilwell Varco UK Limited)

**BATCH**
Automatic and manual batching system
With up to 4 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 sites, 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 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 data.

**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.
Weighing electronics
Connection to scales with analogue strain gauge load cells, entry impedance 43 Ohm-3.3 kOhm (e.g. suitable for 8 x 350 Ohm load cells), or via zener barriers, entry impedance 87.5 Ohm-3.3 kOhm (e.g. suitable for 4 x 350 Ohm load cells). W & M approved resolution up to 6000d at a max. of 80% preload, internal resolution 52400d, update rate selectable 50 – 800 updates/second, smallest load cell signal 0.33 µV/e.
Optional switching and summing function.
Option: connection of scale platforms with digital force transducers.
Option: up to 6 external scale interfaces via ADCBox.

Display and keyboard
Bright, high-contrast 5.7” colour TFT 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 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 analogue I/Os
Up to 8 internal optoisolated inputs and outputs, 24 VDC, or external relay / transistor module (64 inputs, 64 outputs max.). Internal 15-bit analogue output, external module for up to 4 analogue inputs / outputs as option.

Fieldbus interface
Ethernet/IP, Profibus DP 12 Mbit, Profinet or Modbus TCP.

Ethernet interface
10/100 Mbit Ethernet interface with integrated web server, WLAN as option.

Construction Options

- Stainless steel housing, IP66K, NEMA 4X
- For desk-top or wall-mount installation
- Dimension W x H x D: 398 x 239 x 154 mm (15.7” x 9.4” x 6.1”)

USB
USB 2.0 host interface with optional IP67 connector for PC keyboard, scanner or USB stick.

Security
Power-fail-safe storage of data, password protected, battery-backed real-time clock, remote diagnosis over Ethernet / Internet possible.

CPU / operating system
32-bit ARM processor,
266 MHz, 0.5 MB data memory, expandable, Linux based real-time multitasking operating system.

Free Programmability
Comprehensive PC-based programme development and test environment. Programming with RTC W/N in ‘C’ in compliance with WELMEC software guidelines. Complete software development and test/simulation on PCV.

Options
RTC W/N
IT8000E programming environment.

PC COM+
Active X component for the communication with PC programme.

Ex2/22 version
For installation in Ex zones 2 and 22.