



IT4000E *DOS*

Single Component Filling Controller

IT4000E DOS is a universal W&M approved filling controller for use as non-automatic weighing instrument (NAWI) for the gravimetric filling of liquid and solid material.

IT4000E DOS controls the filling process with fast and slow speed via screw or vibratory feeder or filling valve.

Target weights, tolerances and preact values can be stored in a product file.

Tare check and automatic taring of the empty container is possible.

Single bags or batches can be filled in semi or fully automatic operation.

The most important features are:

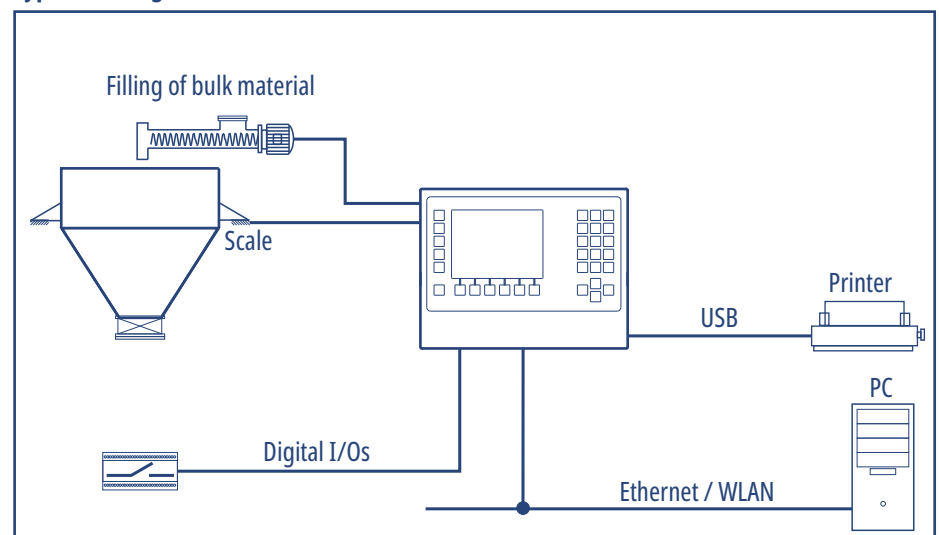
- **High throughput** enabled by fast signal processing with powerful digital filtering
- **Accurate fill control** through fast acting, trend-sensing preact optimization and tolerance check
- **Recording of all data** pertaining to individual fill cycles or batches, with printing or data transmission
- Suitable for filling and discharging applications.

Simple operation via onscreen menus and softkeys ensures error-free operation and minimum training requirements.

Two different versions of the housing are available:

- **Compact stainless steel housing** for desk-top or wall-mount installation
- **Panel-mount housing** for installation in switch cabinet.

Typical Setting:



Weighing electronics

- Integrated signal amplifier to connect up to 16 strain gauge load cells in 4- or 6-wire mode
- Calibration as single or multiple-range and as single or multi-interval scale.

Fast and precise filling

- Fast signal processing (up to 800 updates per second)
- W&M approved resolution 6,000 d with a maximum preload of 80 %, internal resolution 524,000 d
- 1- or 2-speed filling
- Automatic trend-sensing preact optimization.

Security

- Flow rate check to monitor material flow
- Power-fail-safe storage of data
- Password protection for access to all data.

Simple and secure operation

- Operator is guided on a bright, high-contrast color TFT display. Numeric keyboard with multiple key assignment for the entry of alphanumeric data, tactile acid-resistant membrane keyboard and softkeys or optional full-size PC keyboard
- Display of number of fillings, average net weight and remaining fill weight
- Display of product name, target weight and bargraph showing approximation to target
- Error messages marked in red
- Operation via softkeys, i. e. the assignment of the function keys is indicated with clear text in the language of the country
- Up to 10 products with pertaining values for target weight, tolerance etc. can be stored against a 2-digit product number.

Ethernet interface (option: WLAN)

Integrated Ethernet interface with selectable IP address for data transmission to PC and remote diagnosis over Internet.

Integrated USB interface

To connect printer or PC keyboard.

Serial interfaces

- For printer (option)
- For data transmission to PC (option)
- RS232, 20mA CL, RS422 or RS485, protocol / baud rate selectable.

Digital interfaces

Optoisolated inputs / outputs (24 V) to connect relays / PLC or external relay module.

Electrical connections

110 (–15 %)–240 (+10 %) V AC;
50 / 60 Hz, option: 12–30 V DC,
power consumption max. 20 VA.

Operating temperature

–10 °C (+14 °F) to +40 °C (+104 °F),
max. 95 % relative humidity, non-condensing.

Accessories

- Relay module with safe separation of inputs / outputs (24 V, 3 A)
- Remote display etc.

Ex2/22 version

For installation in Ex zones 2 and 22.

Typical filling cycle:

- Select product – enter target weight and number of batches
- System ready for start – start manually or through external signal
- Tare check and / or automatic taring
- 1- or 2-speed feeding with flow rate monitoring
- Tolerance check with preact optimization and automatic jog feeding if minus tolerance is detected
- Printing and transmission of gross, tare, net, date, time, consec. number and product number
- Message 'Done' and 'Ready for start' for the next cycle.

Construction:

Desk/wall version



- Stainless steel housing, IP69K, NEMA 4X
- Dimension W x H x D: 330 x 239 x 134 mm (13.0" x 9.4" x 5.3")

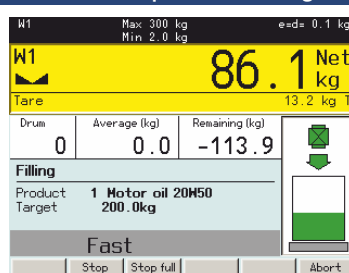
Panel-mount version



- Stainless steel housing, fascia plate protected to IP69K, NEMA 4X
- Dimension W x H x D: 285 x 224 x 69 mm (11.2" x 8.8" x 2.7")
- Cutout in panel: 268 x 207 mm (10.6" x 8.1")

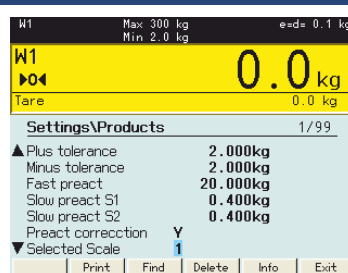
Display / operation:

Start template for filling



Product selection, entry of target weight and number of fillings, start

Product file



Template for entry of product data in product file, softkeys for simple operation

Directives: 2014/30/EU, 2014/31/EU, 2014/35/EU

Standards: EN 45501, OIML R 76-1, EN 61000-6-2, EN 61000-6-4, NAMUR NE21, EN 62368-1, OIML R 61



ETL certified in accordance with UL 62368-1 and CSA C22.2 No. 62368-1



EMI compliance with FCC Part 15



Measurement Canada: Approval as indicating element



NTEP approval as indicating element