Discover smart weighing

IT8000E *BULK*

Approved Bulkweighing Controller for Shipping and Receiving Systems

IT8000E *BULK* is a universal, Weights and Measures approved bulkweighing controller for the shipping and receiving of bulk material. **IT8000E *BULK*** captures the total weight of the incoming bulk material or fills outgoing shipments to a preset target weight.

The controller will connect to all hopper scales or process scales with analog load cells.

IT8000E *BULK* can be used for weighing systems with one or two hopper scales (duplex scale). The scales can fill/discharge simultaneously or one after another.

Essential features:

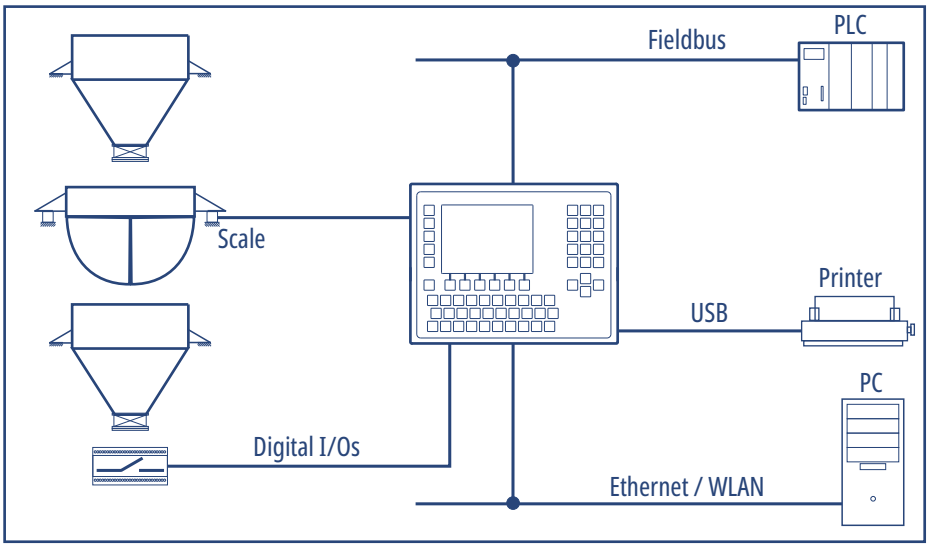
- **Maximum throughput** through fast signal processing with integrated digital filters
- **Secure restart** of the system after power failure
- **Control and trend-sensing optimization** of the material flow for shipping, optionally with precise stop when reaching the target weight or continue feeding to empty the conveyor belt
- 2-speed filling of the last two tips ensures **high dosing accuracy.** It is also possible to feed every cycle in two speeds to achieve a high uniformity of tips.
- **Automatic adjustment** of cut-off values (preact optimization)
- Extensive **optional monitoring** functions
- **Recording of all batch data**, including tip target and weight, optional details of each tip. Reports on printer, host computer and/or file
- Optional configuration of **customer-tailored disclosures**, e.g. purity or humidity
- Optional **error and event logging**, e.g. batch start or interruption
- Storage of up to 128 records for **product related data**, e.g. preact values, upstream time and weight, silo number, etc.
- **Optional address file** for up to 250 records.

IT8000E *BULK* can be operated as stand-alone system or connected to a supervisory control system. Free configuration of external digital inputs and outputs. Connection to control system via fieldbus or serial communication.

The controller is available in two styles:

- **Compact stainless steel enclosure** for desk or wall mounting
- **Panel-mount version.**

Typical Setting:



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Fast and accurate filling

- Fast signal processing (typically 225 updates/sec)
- Weights and Measures approved resolution of 10,000 d with a max. preload of 80 %, internal resolution 524,000 d
- Accuracy class 0.2, 0.5, 1 or 2
- 1- or 2-speed filling
- Automatic optimization of the material flow
- Automatic trend-sensing preact optimization.

Data capture of all relevant data

- W&M approved capturing of the total weight shipped/received
- Additional recording of shift totals, product totals and total quantity over all batches

Optional duplex scale operation

- Very high performance by operating two scales (duplex scale).
- Filling of both weigh hoppers one after another or independently of each other.
- Discharging of the weigh hoppers one after another or simultaneously
- The last two tips of a batch will always be fed and discharged one after another in order to reach the preset target weight with high accuracy

Simple and secure operation

- Operator is guided through the process on a high-contrast TFT display. Data entry via alphanumeric keyboard and softkeys
- Up to 128 products with pertaining values for target weight, preact, weight tolerance etc. can be stored against a 3-digit ident number.

Monitoring functions for

- Tolerance, flow rate, filling time of weigh hopper
- Material supply and air pressure.

Safety

- Power-fail-safe battery back-up of all data for the running shipping/receiving
- Power-fail-safe storing of all settings, product data and addresses
- Password protection for all data
- Battery-backed real-time clock.

Weighing electronics

Integrated signal amplifier to connect to strain gauge load cells in 4- or 6-wire mode.

Ethernet connection

Integrated Ethernet interface for data transmission, connection to printer or remote diagnosis/service purposes.

USB interface

USB interface to connect printer or an external data storage device (memory stick)

Serial interfaces

Serial interfaces (RS232, RS485 or RS422) for connection to printer, PC or external digital I/O modules

Digital I/Os

- Digital I/Os to control the feeding devices and to connect to sensors and actuators
- Opto-isolated (24 V DC) to connect relays or a PLC
- External relay modules via an RS485 interface

Fieldbus

Profibus DP, Profinet, Ethernet/IP or Modbus® TCP.

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 secure separation of inputs and outputs (24 V, 3 A).

Ex2/22 version

For installation in Ex zones 2 and 22.

Status display during operation:

- Display of order number, customer data, product number and name, shipped/received quantity, number of tip cycles, throughput rate and operation status
- Display of clear-text error messages, e.g. 'Surge hopper not empty'
- Colored visulization of supply, weigh and surge hopper.

Construction:

Desk/wall version

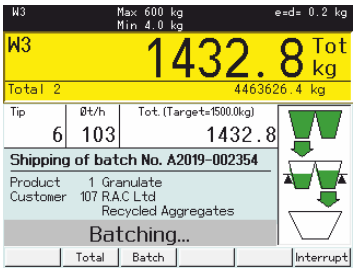
- Stainless steel housing, IP69K, NEMA 4X
- Dimension W x H x D: 330 x 239 x 134 mm (13.0" x 9.4" x 5.3")

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")

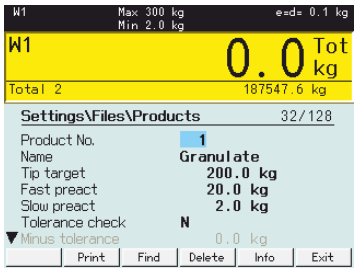
Display / operation:

Shipping / receiving



Display of order data and visualization of supply, weigh and surge hopper

Product file



Entry of product data, softkeys for simple operation

Directives: 2014/30/EU, 2014/31/EU, 2014/32/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 107

EU Type-examination Certificate as non-automatic weighing instrument, discontinuous totalizer

NTEP approval as indicating element

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

Type-examination Certificate as non-automatic weighing instrument, discontinuous totalizer

EtherNet/IP Modbus®

PROFINET PROFIBUS

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Subject to change without notice

ST.2309.1331 IT8000E_BULK_DBE.PDF 06.2024

Sales and service