

Bulkweighing Controller – Weights and Measures Approved, for Shipping and Receiving Systems

IT8000E
BULK



IT8000E BULK is a universal bulkweighing controller for the shipping and receiving of bulk material.

The controller captures the weight of incoming material and fills outgoing shipments to a preset target weight.

IT8000E BULK will connect to all scales with strain gauge load cells.

Essential features:

- **Maximum throughput** through fast signal processing with efficient digital filtering
- **Accurate fill control** through fast acting trend-sensing preact adjustment and weight tolerance control
- **High operational security** through extensive monitoring functions and simple operator control
- **Recording of all batch data** e.g. product-related weight totals, batch protocols and test reports for W&M acceptance. Optionally, printout of data and/or data transmission
- **Remote diagnosis and remote operation** possible over Internet.

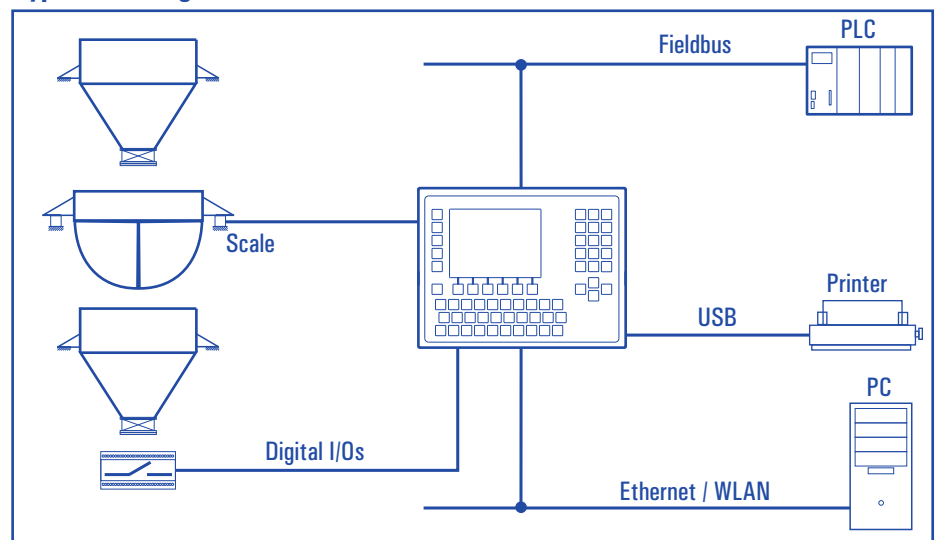
The terminal is available in two styles:

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

IT8000E BULK controls the filling process via screw feeders, sliding gates or flaps for up to 128 silos.

Operator prompting and permanent indication of status with **clearly structured menus on color screen** ensure **fast and error-free** operation and minimum training requirements.

Typical Setting:



Fast and accurate filling

- Fast signal processing (800 updates / sec)
- Weights and Measures approved resolution of 6,000 d with a max. preload of 80 %, internal resolution 524,000 d
- 1- or 2-speed filling
- Automatic trend-sensing preact optimization.

Data capture of all relevant data

- Data logging of total weight, product-related totals and shift totals
- Optional entry, printout and transmission of application-related data, e.g. order number, batch number, shift ID.

Simple integration

- Stand-alone or remote-controlled operation over fieldbus possible
- Start / stop functions are possible from external switches.

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, filltime and flow rate
- Material supply and air pressure.

Security

- Power-fail-safe data storage
- Password protection
- Battery-backed real-time clock.

Weighing electronics

Integrated signal amplifier to connect up to 16 strain gauge load cells in 4- or 6-wire mode.

Ethernet connection

Integrated Ethernet interface with configurable IP address, for data transmission or remote diagnosis over Internet.

Serial interfaces

- For printer (option)
- For data transfer to PC (option), protocols: STX...ETX, TTY, AckNak etc.
- RS232, 20mA CL, RS422 or RS485 selectable, protocol/baud rate configurable.

Digital interfaces / Fieldbus

- Opto-isolated inputs / outputs (24 V) to connect relays or a PLC, or
- External RS485 relay module, or
- Profibus DP, Profinet, Ethernet/IP or Modbus TCP.

Electrical connections

110 (-15 %)-240 (+10 %) VAC;
50 / 60 Hz, option: 12-30 VDC,
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 visualization 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

W1	Max 300 kg	e=d= 0.1 kg
Min 2.0 kg		
W1		19.9 kg
Gross 19.9 kg		
Tip	Qt/h	Batch total (kg)
11	24.5	1061.9
Batch 32145698721		
Product	1 Granulate	
Customer	107 RAC L.td.	
Recycled Aggregates		
Feeding...		
Finish	Total	Batch Stop DW Info Abort

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

Product file

W1	Max 300 kg	e=d= 0.1 kg
Min 2.0 kg		
W1		0.0 kg
Gross 0.0 kg		
Settings\Files\Products 4/128		
Product No.	1	
Name	Granulate	
Tip target	200.0kg	
Fast preact	50.0kg	
Slow preact	5.0kg	
Tolerance check	N	
Minus tolerance	0.0kg	
Print Find Delete Info Exit		

Entry of product data, softkeys for simple operation

Directives: 2009/23/EC, 2004/108/EC, 2006/95/EC, 2004/22/EC

Standards: EN 45501, OIML R76-1, EN 61000-6-2, EN 61000-6-3, NAMUR NE21, EN 60950, OIML R107

EC approval as non-automatic weighing instrument, MID approval as discontinuous totalizer

NTEP approval as indicating element

ETL certified in accordance with UL 60950-1 and CSA C22.2 No. 60950-1

EMI compliance with FCC Part 15

Measurement Canada: Approval as non-automatic weighing instrument

Ukraine: Approval as non-automatic weighing instrument