



IT2000M *BATCH*

Multi-Ingredient Batchweighing Control

IT2000M BATCH is a batchweighing controller for the use in combination with the control system **PC BATCH**, for automatic weighing of solid and liquid materials in the **chemical, pharmaceutical, food and other industries**.

The controller connects to load cells or scales of all types and weight ranges.

IT2000M BATCH is suitable for automatic multi-ingredient batchweighing in hoppers, mixers or tanks.

The system controls fast and dribble feed of **valves, screw feeders or similar for up to 31 materials**.

Batching sequences are recipe-controlled.

Recipes contain functions for automatic or manual weighing, weight tolerance check, operator inputs and synchronization steps. Recipe editing is only possible with the batch control system **PC BATCH**.

Production and processing procedures can also be included into an automatic cycle, simply, safely and fast with the batch control system PC BATCH.

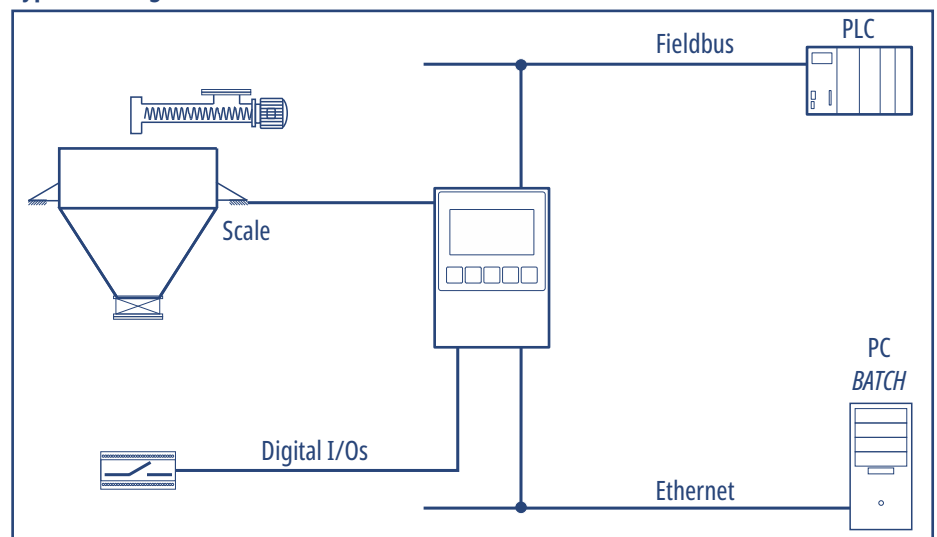
The controller is available in two styles:

- **Compact module for the installation on DIN rail** with integrated display/keyboard
- **Split-mount version consisting of Blackbox module for the installation on DIN rail** and a separate display/keyboard for the installation in door of switch cabinet.

The controller offers functionality to conform with ISO 9001 standards:

- **Accurate fill control** through fast signal processing, trend-sensing preact adjustment and weight tolerance control
- **High operational security** through extensive monitoring functions and simple operation via onscreen menus
- **Simple handling** and the permanent indication of status ensure fast and error-free operation and minimum training requirements

Typical Setting:



Feed control

- Fast and dribble feed with countdown display and tolerance check
- Automatic trend-sensing preact adjustment (selectable in batch control system PC BATCH)
- Automatic top-up feed (jog) in the event of minus tolerance (selectable in batch control system PC BATCH)
- Material flow check with violation alarm (selectable)
- Automatic intermediate discharge when batch size is larger than weighing range (selectable)

Operation

- Operator is guided on a high-contrast display, with symbols for scale status and with keys for taring, zero setting, and other functions
- Sequence and operation can be individually configured. This eliminates unnecessary operator steps
- Operator prompting in English, German, French, Russian or Dutch, other languages on request.

Simple integration

- Remote-controlled operation possible, material parameters, recipe loading via Ethernet interface by PC BATCH control system
- Accept and interrupt functions are possible via external switches.

Weighing electronics

Integrated factory calibrated A/D converter to connect to one or several analog strain gauge load cells (overall impedance 43–3,300 Ohm). Resolution 30,000 d, internal resolution 524,000 d, W&M approved resolution 10,000 d at a max. of 80 % preload, 0.33 µV/e, update rate 50–800 filtered weight values / sec. Calibration as single-range or multiple-range scale. Option to linearize the weight curve.

Standard interfaces

USB, Ethernet and 2 digital outputs.

Options

- Plug-on modules for the connection to Profinet, Profibus DP, Ethernet/IP or Modbus® TCP
- Plug-on module with 8 digital inputs (24 V, 7 mA, optoisolated) and 8 digital outputs (24 V, 500 mA, optoisolated, short-circuit proof)
- Plug-on module with 2 digital inputs (24 V, 7 mA, optoisolated) and
 - socket for a serial-interface module (SIM)
 - two sockets for digital I/O modules (PIM500) or an analog output module (DAU15)
- Zener barriers for the connection to Exi load cells (max. 15,000 d, 3,000 d for W&M approved applications)
- Grounding rail to connect the shield of connection cables.

Electrical connections

Supply voltage: 12–30 V DC, power consumption max. 17 VA.

Operating temperature

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

Construction:

Module With Display



Dimensions W x H x D:
92 x 120 x 106 mm
(3.6" x 4.7" x 4.2")

Display Unit And Blackbox



Display Unit W x H x D:
110 x 107 x 35 mm
(4.3" x 4.2" x 1.4")

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

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



EU Type-examination Certificate as non-automatic weighing instrument



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



Type-examination Certificate as non-automatic weighing instrument

