

Weighing Terminal for Statistical Quality Control Compliant to the Regulations for Prepackaged Goods



IT8000 SQC is a checkweighing terminal for capture and evaluation of samples in compliance with the Regulations for Prepackaged Goods.

The terminal connects to scales and force transducers of any type, eg:

- Desk-top scales
- Bench scales
- Precision scales.

High resolution and fast signal processing of the **IT8000 SQC** terminal permit precise capturing of samples without slowing down the production process. Samples can be checked either by weight or by volume.

Checkweighing results of sample and batch are indicated on the multi-line text display. **Operation** via clear operator display prompts is **simple** and ensures fast and error-free operation and minimum training requirements.

Compact stainless steel housing (IP65) for desk-top / column-mount or wall-mount installation.

Essential features:

- **Product file for up to 200 products** with automatic allocation of permissible tolerances compliant to the regulations and the option to set narrower tolerances
- **Entry of tare weight or series of tare weighings with calculation of mean value**
- Independent evaluation of identical products at up to 20 production lines
- 3 different check methods: individual, additive and 2-phase
- Printout of samples and/or batch results on printer with 40 or 80 columns printing width. Optional data transmission of results to host system
- **Ring buffer for statistics with 500 entries**, eg for the last 100 days with 5 products per day; evaluation and printout by product and period.

Rapid and precise quality control:

- Fast signal processing (50 updates/sec)
- W&M approved resolutions of 6,000d with a maximum preload of 80%, 524,000d internal resolution
- Classification into 5 tolerance zones corresponding to Prepackaged Goods Regulations
- Automatic allocation of permissible tolerances
- Tare weighing or calculation of average tare weight.

Security:

- Data is retained in the event of power loss
- Password protection for all data
- Battery-backed realtime clock
- Indication of error messages.

Simple and secure operation:

- Operator is guided on a high-contrast alphanumeric display. Data entry is via numeric tactile acid-resistant membrane keyboard
- Up to 200 products with nominal weight, tolerance zones, etc. can be selected via 5-digit Id-No.
- Automatic allocation of permissible tolerances
- Warning is output if attempt is made to change product data during running check cycle.

Capturing of all relevant data:

- Comprehensive statistics functions with mean value, standard deviation, number of weighings, etc.
- Evaluation by product and period
- Closed loop function with feed back for adjustment of feeding device.

Weighing electronics:

- Integrated signal amplifier for connection of up to 16 strain gauge loadcells in 4- or 6-wire mode
- Calibration as single or multiple-range and as single or multi-interval scale.

Optional digital scale connection:

Connection to scale platform or loadcell(s) with digital output via RS485 or IDNet interface.

- Sartorius IS platforms
- Mettler-Toledo understructures with PikBrick loadcells.

Serial interfaces:

- RS232, 20mA CL, RS422 or RS485, protocol/baudrate configurable
- For printer (option), protocol: EPSON or TTY
- For data transfer to PC (option)
- Multidrop network via RS485 interface or Ethernet interface.

Electrical connections:

110 (-15%) – 240 (+10%) VAC, 50/60 Hz, option: 12 – 30VDC, power consumption max. 25VA

Operating temperature:

-10°C to +40°C, 95% relative humidity, non condensing.

Accessories:

- Column for floor-mounting
- Protocol printer
- Protective dust/splash cover.

Option:

Connection to PC program PC SQC for centralized administration of check results and product data.

Ex version (option):

Model IT8000Ex with ATEX approval for installation in hazardous area, zone 1 (gas) or zone 21 (dust), with limited interface options (see IT8000Ex leaflet).

Model IT8000 Ex2/22 with ATEX approval for installation in hazardous area, zone 2 (gas) or zone 22 dust).

Typical check cycle:

- Choose production line
- For new product choose one from product file
- Enter batch data
- Capture weight when threshold is exceeded and start checkweighing
- Assign captured weight to tolerance zone, enter in statistics file
- Capture next sample until complete
- Display and optionally print result of sample
- On end of batch display and optionally print result of batch
- Next cycle...

Example for protocol print

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Line No.15 Product-No. 125 Product: ....Crystal Sugar Fine SW. 1.00
Date/Time: 26.10.00 / 15:45 Batch 120009 Sample 1
Ref.Weight 500.0 g Number ....10 -TU2: .....0 Max: 504.0 g
Tare Weight 15.0 g -TU1: .....1 Min: 484.0 g
TU2: 470.0 g Mean Val. 499.7 g -TO1: .....9
TU1: 485.0 g Deviation. 5.533 g -TO2: .....0
TO1: 515.0 g +TO2: .....0
TO2: 530.0 g TU1%: .....10
Result: > 2,5% TU1
    
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Optional printout with 40 characters / line

Construction:

Desk / wall version



- Stainless steel housing, IP65
- Available for desk-top or wall-mount installation or with optional column for floor mounting
- Dimensions WxHxD: 260x210x135mm

Panel-mount version



- Stainless steel housing, fascia plate protected to IP65
- Panel-mount installation
- Dimensions WxHxD: 260x215x70mm
- Cut-out in panel: 243x198mm

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



EC approval as non-automatic weighing instrument

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



NTEP approval as non-automatic weighing instrument



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



EMI compliance with FCC Part 15



Mesures Canada: Approval as non-automatic weighing instrument



Russia: Approval as non-automatic weighing instrument, AGFI, automatic catchweighing instrument, discontinuous totalizer



Ukraine: Approval as non-automatic weighing instrument