



IT6000E *ONLINE OP*

W&M Approved Weighing Terminal with Modbus TCP

IT6000E *ONLINE OP* is an industrial weighing terminal with Modbus TCP and/or serial PLC interface, which combines the functionality of a filling controller with a PLC operator panel.

Together with other fieldbus participants up to 127 devices can be connected to a PLC or PC and integrated into a SCADA system.

One scale of any type can be connected to the terminal, e.g. hopper, floor or precision scale.

The high resolution and fast signal processing of the **IT6000E *ONLINE OP*** enable rapid and precise weight measurements and fillings.

The communication between host and **IT6000E *ONLINE OP*** is made via the exchange of data words.

Weight values and status information of the scale can be read from the corresponding data words.

Interface:

Modbus TCP

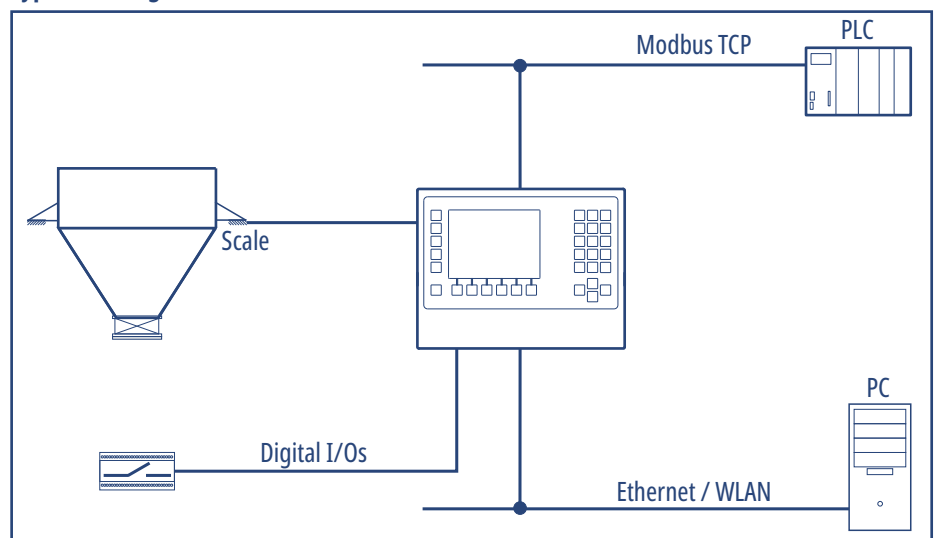
Other data words permit the remote control of functions such as:

- Filling (weigh-in or weigh-out)
- Taring
- Clear tare
- Set zero
- Display text
- Enter data
- Set digital outputs.

The controller is available in two styles:

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

Typical Setting:



Terminal with Modbus TCP

IT6000E ONLINE OP enables the simple connection of a weighing terminal / filling controller to a PLC / PC for process control and visualization.

The terminal is connected and configured via Modbus TCP.

The network communication automatically updates specified data words of the network participants. Commands and information are exchanged through writing and reading of these data words.

The host system is always in full control of the operating sequence.

The following **example** shows how a PLC controls the automatic filling into a hopper scale:

- The PLC writes the data words for target weight, preact and tolerance
- The PLC sets the command bit 'Start Filling'
- **IT6000E ONLINE OP** controls the automatic filling, optimizes the preact and writes the actual weight into the data word 'Filling Quantity'
- **IT6000E ONLINE OP** sets the status bit 'Filling Done'.

Commands

- Read weight, settled or in motion
- Batching (weigh-in or weigh-out)
- Manual tare
- Autotare
- Set zero
- Display text (OP function)
- Operator prompt with input
- Bargraph display
- Read digital input
- Set / reset digital output.

Security

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

Weighing electronics

- Integrated signal amplifier to connect up to 16 strain gauge load cells (e.g. 2 x 8) in 4- or 6-wire mode
- Calibration as single or multiple-range and as single or multi-interval scale
- W&M approved resolution of 6,000 d with a max. preload of 80 %, internal resolution 524,000 d
- Connection of precision scale (option).

Display and keyboard

Bright 5.7" color TFT display with wide viewing angle.

Modbus TCP

Connection to PLC or SCADA system over Modbus TCP (Slave).

Digital interfaces

- Max. 4 optoisolated inputs and 4 optoisolated outputs (24 V) or
- Option: external relay or transistor module.

Ethernet interface

Internal Ethernet interface with selectable IP address and web server functionality.

Integrated USB interface (option)

To connect a scanner or PC keyboard.

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

Ex2/22 version

For installation in Ex zones 2 and 22.

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")

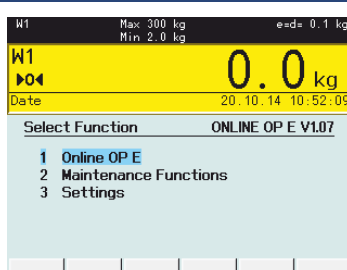
Panel-mount version



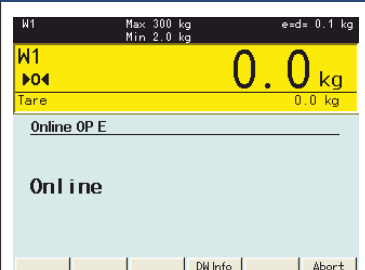
- Stainless steel housing, fascia plate protected to IP69K, NEMA 4X
- Dimension W x H x D: 285 x 224 x 69 mm (11.2" x 8.8" x 2.7")
- Cutout in panel: 268 x 207 mm (10.6" x 8.1")

Display / operation:

Main menu



Online Display



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

CE EU Type-examination Certificate
as non-automatic
weighing instrument

NTEP approval as
indicating element

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

FC EMI compliance with
FCC Part 15

Canada Measurement Canada: Approval as
indicating element

UK CA Type-examination Certificate
as non-automatic
weighing instrument