



TC-M10 / TC-M20

Remote indicator

Your benefits

- Integrated data storage function:
No data loss and guaranteed security of the billing data
- Inquiry voltage for the meter outputs supplied via the remote indicator:
No additional cabling required
- Mode switching (display and setting mode) via key:
Protection against manipulation

Features

- 10 or 20 potential-free pulsers can be processed
- Meter readings displayed in the LCD with 6 digits max.
- Parameterisation of physical units and decimal places per input
- Display mode for viewing of meter readings
- Setting mode for parameterisation of the individual meters
- Integrated mains adapter

Application

- The remote indicators TC-M10 and TC-M20 allow to read gas, water and heat meters without direct access the meters.

1. Display mode

To changeover to the display mode turn the key switch into vertical position.

1.1 Activation of display

During operation the «function»-LED blinks every second, the display is not active. By touching of ← or ↑ buttons the display is activated. Inside the display mode the push buttons E and R have no function. If there is no operation of a push button within 5 min., the display goes out.

1.2 Selection of the user

After operating the push button ← the meter reading of user 1 and after repeated operation of the button, the meter reading of user 2 shows on the display etc.

1.3 Meter reading of the user

After operating the push button ↑ all meter readings show up in 3 second-interval. By pressing the buttons ← or ↑, the display stops at the actual user.

Technical Data

Case	GFK
Protection	IP65
Supply voltage	230VAC
Pulse	Contact Reed or Open-Collector max. 5Hz, current app. 8-10mA
Interrogate voltage	5VDC
Dimensions (HxWxD)	TC-M10: 184x220x120mm TC-M20: 220x260x150mm

Attention! Important information for installation!

To avoid misfunction resp. interruption, please take note of the following: water meter, heat meter, gas meter and remote indicator may not be mounted directly besides fluorescent lamps, E-motors, switchboxes or other electrical devices/jam sources (distance min. 1 m). Do not lay feeler cable and connection mains of remote indicator parallel to mains (230/380 V) (distance min. 0,3 m).

- Lay per measuring instrument a 2-wired shielded line (e.g. J-Y (St) Y or LIY (C) Y).
- Distance up to 30m: cross-section of the core 0,6mm²
- Distance up to 100m: cross-section of the core 0,8mm²
- Connecting shield of the remote indicator to the clamp fillet «PE»

2. Setting mode

To changeover into setting mode turn the key switch into the horizontal position.

2.1 Setting of the user (e.g. 24)

- Selection of the user (see display mode)
- Press E; the right digit blinks
- Touch ↑ until 4 appears
- Switch over ← to tens digit
- Touch ↑ until 2 appears
- Press E for storage

2.2 Setting the decimal point (e.g. 0,0)

- Selection of the user (see display mode)
- E must be pressed and ← operated: comma blinks at the last position on the right
- ← operate 1x: comma moves one position to the left. Indication 0,0
- Operate E for storage

2.3 Setting the units (e.g. MWh)

- Selection of the user (see display mode)
- E must be pressed and ↑ operated: the set unit flashes operate ↑ until the desired unit (m³, MWh or none) appears
- Operate E for storage

2.4 Resetting of the user values

- Selection of the user (see display mode)
- Operate R 2x (was R touched 1x by mistake, the resetting can be prevented by operating one of the following buttons ←, ↑ or E).

2.5 Resetting of all user values

- Disconnect mains connection resp. drag mains plug
- Turn key switch to the horizontal position for control mode
- E and R must be pressed simultaneously and re-establish the mains connection (wait 3 sec)
- All values are deleted. The main configuration like units and decimal points remain stored.

