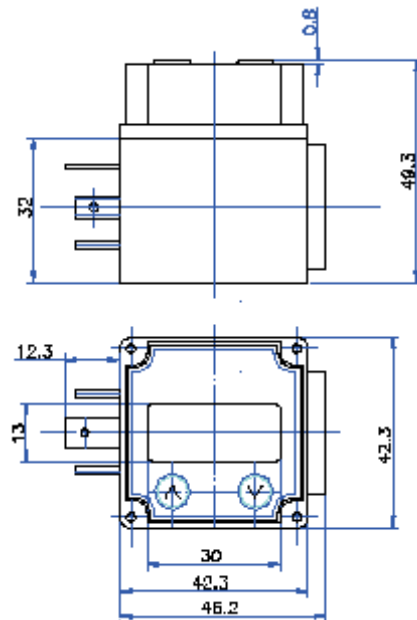




# MT-IND USER MANUAL



## 1. Brief

MPI series universal intelligent 2-wire LED digital display is fit for all of the transmitters and converters with 4~20mA 2-wire technique, just as pressure, differential pressure, temperature, flow, PH, acceleration and so on. 16 Bit ADC MCU inside. Customer can use the two buttons to program the zero point, span, decimal point, damping and alarm point etc. Instead of the potentiometer.

## 2. Features

- ◆ 2-wire, no additional power supply required, just as traditional LCD display.
- ◆ Visible in the dark environment.
- ◆ 16 Bit ADC MCU inside.

- ◆ The scope of the value can be displayed on the LED is -1.9.9.9. ~ 9.9.9.9.
- ◆ LED can work at 3mA
- ◆ Two OPTO switch outputs. (Optional)

## 3. Technical data

### Analogue signal:

2-wire-system: 4...20 mA

### Supply:

Supplied by current loop; voltage drop  $\leq 4.2V$

### Electrical protection:

Short-circuit protection: permanent

Reverse polarity protection: no damage, but also no function

### Display:

Type: 4-digit, red LED display, digit height 7 mm, digit width:

4.85 mm

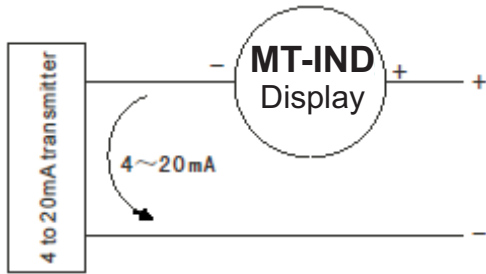
Range: -1.9.9.9. ~ 9.9.9.9.

Accuracy: 0.1%

### Temperature:

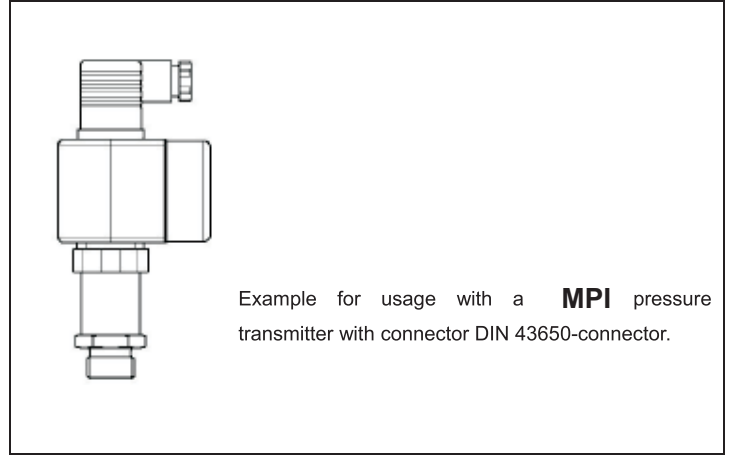
Ambient, storage and operation: -20~70°C

## Electrical Connection



### Pin configuration

Electrical connection	DIN 43650
2-wire-system	
Supply +	1
Supply -	2
Ground	Ground contact



## 3. Setting

\* In the following description, "A" denote the button " $\swarrow$ ", "B" denote the button " $\searrow$ ", and "A+B" denote pressing the button " $\swarrow$ " and button " $\searrow$ " at the same time.

### 1. Power on

After the digital LED display was connected to the current circle 4~20mA, the name of the manufacturer is displayed, and enter into the interface of display.

### 2. Zero-point (value to be displayed for 4mA)

Press button "A+B", unit **SEt2** is displayed.

→ "A+B" menu item for setting: **0400**

→ "A" to move the cursor, "B" to change the value that the cursor point to. For example: -100.0Kpa. **1000**

→ "A+B" to confirm and store setting and return to the menu item.

### 3. Span (value to be displayed for 20mA)

Press button "A", unit **SEtS** is displayed.

→ "A+B" menu item for setting: **2000**

→ "A" to move the cursor, "B" to change the value that the cursor point to.

For example: 100.0Kpa **1000**

→ "A+B" to confirm and store setting and return to the menu item.

## 4. Decimal point

Press button "A", unit **dot** is displayed.

→ "A+B" menu item for setting: **-.-.-**

→ "A" to move the decimal toward left, "B" to move the decimal toward right.

→ "A+B" to confirm and store setting and return to the menu item.

## 5. Damping

Press button "A", unit **dAP** is displayed.

→ "A+B" menu item for setting: **2000**

→ "A" to move the cursor, "B" to change the value that the cursor point to. (Min=0s, Max=20s, step 0.5s)

→ "A+B" to confirm and store setting and return to the menu item.

## 6. Alarm

Press button "A", unit **HiLo** is displayed.

→ “A+B” menu item for setting:

→ “A” or “B” to change the setting either “on” or “off”. “on” means the parameter followed is valid, and the Alarm was expressed by the twinkle of the last decimal point. And “off” cancel the alarm function.

→ “A+B” to confirm and store setting and return to the menu item.

#### 7. The first alarm point

Press button “A”, unit  is displayed.

It is configured in percentage of span.

#### 8. The second alarm point

Press button “A”, unit  is displayed.

The method of setting is the same as step 7.

#### 9. The direction of the first alarm point

Press button “A”, unit  is displayed.

→ “A+B” menu item for setting:

→ “A” or “B” to change the setting either “up” or “dn”. “up” means alarm while the value change from small to big, and “dn” means alarm while the value change from big to small.

→ “A+B” to confirm and store setting and return to the menu item.

#### 10. The direction of the second alarm point

Press button “A”, unit  is displayed.

Other is the same as 9.

#### 11. The delay

Press button “A”, unit  is displayed.

→ “A” menu item for setting.

→ “A” to move the cursor, “B” to change the value that the cursor point to. (Min=0s, Max=30s)

→ “A+B” to confirm and store setting and return to the menu item.

→ “A” return to the original interface. And all setting is completed.



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