# CHINT

# XMT-4000 series

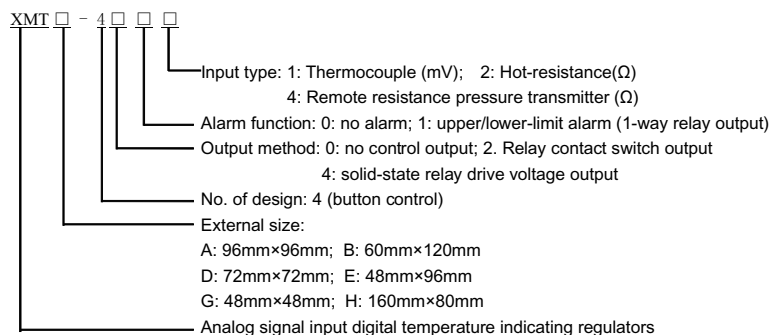## digital temperature indicating regulators

Summary:

XMT-4000 series digital temperature indicating regulators has variety of advantages, such as high accuracy, easy installation, good reliability, strong anti-vibration and anti-interference ability, etc. With various of external sizes and complete control mode, it can be widely applied into temperature measurement and automation control within -200℃to 1800℃for those industries including plastic, rubber, packing, food machinery, metallurgy, refrigeration, chemical, medical treatment, etc.

## 1. Main functions and characteristics:

◆ High cost performance with accuracy of class one, adopting keyboard input settings.

◆ Support same type of sensor with graduation freely switched, full range of measurement and automatic switching for resolution

◆ The input adopts digital correction system, the built-in common thermocouple and hot-resistance non-linear correction table for accurate measurement.

◆ The potentiometer regulation and time scale regulation can be freely switched, and the positive& negative effect can be set.

◆ It has perfect self-checking and protection function. According to the nature of the error, it can automatically correct or timely propose and close output when errors occur.

## 2. Model specification and selection description:

XMT □ – 4 □ □ □

Input type: 1: Thermocouple (mV);   2: Hot-resistance(Ω)
          4: Remote resistance pressure transmitter (Ω)

Alarm function: 0: no alarm; 1: upper/lower-limit alarm (1-way relay output)

Output method: 0: no control output; 2. Relay contact switch output
             4: solid-state relay drive voltage output

No. of design: 4 (button control)

External size:
A: 96mm×96mm;  B: 60mm×120mm
D: 72mm×72mm;  E: 48mm×96mm
G: 48mm×48mm;  H: 160mm×80mm

Analog signal input digital temperature indicating regulators

## 3. Input specification and measuring range:

| Input type | Graduation | Measuring range |
|---|---|---|
| Thermocouple (TC) | K | -50~+1350℃ |
| | S | -50~+1750℃ |
| | R | -50~+1750℃ |
| | T | -200~+400℃ |
| | E | -50~+800℃ |
| | J | -50~+1000℃ |
| | B | 0~+1800℃ |
| | N | -50~+1300℃ |
| Hot resistance (RTD) | Cu50 | -50~+150℃ |
| | Pt100 | -200~+850℃ |
| Resistance ® | 30Ω~350Ω | |

## 4. Main technical performance and parameters:

| Item | Type index |
|---|---|
| Basic error | ±1.0%F·S±1 word |
| Sampling period | <0.3s |
| Regulation mode | ≤±1.0%F·S            ≤±0.5%F·S |
| Switch difference | Position regulation (positive/negative effect and switch difference can be set) Time scale regulation(positive/negative effect and proportional band, null cycle and manual adjustment coefficient can be set) |
| Cold end compensation | The error is less than 2℃  within the range 0℃~40℃ |
| Alarm mode | Have upper-limit alarm and lower-limit alarm, can realize single way alarm output, can freely choose resolute value alarm or deviation alarm |
| Output specification | Relay contact switch output: 28VDC/5A, 250VAC/5A Solid state relay drive voltage output: 12VDC/25mA |
| Work power supply | AC198V~242V, 50Hz/60Hz, consumption<5VA |
| Work environment | Temperature 0℃~50℃, the relative humidity no more than 85% non-corrosiveness places |

Note: F·S is the range of the meter. The meter with B graduation thermocouple can measure within the range 0~+1800℃, but the basic error can not be guaranteed below 600℃.

## 5. External and installation size:

(Unit: mm)

| Model | Panel size | Shell size | Cutting size |
|---|---|---|---|
| XMTA series | 96×96 | 90×90×80 | 92×92 |
| XMTE series | 48×96 | 44×90×100 | 45×92 |
| XMTB series | 60×120 | 55×112×80 | 56×114 |
| XMTG series | 48×48 | 44×44×100 | 45×45 |
| XMTD series | 72×72 | 66×66×80 | 68×68 |
| XMTH series | 160×80 | 150×75×100 | 152×76 |