

AI-702M/704M/704M2/706M MULTI-CHANNEL INDICATOR

PRODUCT INTRODUCTION

Al series multi-channel indicator suits for measuring, alarm, transmission and communication of multiple physical parameters such as temperature, humidity, pressure, flow, liquid level and etc. Widely used in electric power, chemical, metallurgy, food processing, machinery manufacturing and other fields. Products are designed for 10-year life at least and 3-year free warranty.

FUNCTIONS AND FEATURES

- Programmable modular multiple inputs, thermocouple, RTD, voltage, current, and two-wire transmitter optional with 0.2%FS measuring accuracy. Every channel supports different input specification and freely defined measuring range, decimal position, resolution ratio, digital filtering strength and 0ther parameters.
- 🔘 Using high performance component greatly reduces temperature drift and the mutual interference among channels,realizing same accuracy and anti-interference ability as single channel indicator.
- O AI-702M, AI-704M/AI-704M2 and AI-706M multi-channel indicators provide 1∼2, 1∼4, 1∼6 channels of measuring, and support internal calculation functions including square root extraction, summation, subtraction and multiplication.
- Support RS485 communication using as lower machine of AIDCS intelligent distributed control system, paperless data logger and touch screen control system. Provide switch signal inputs or outputs to upper machine.
- Up to 2 channels retransmission output when RS485 communication no need. Any input channel can be retransmitted by OUTP port or 6 channels can be cyclically retransmitted. Can be edited as 2 IN 2 OUT transmitter.
- Equipped fixed point/patrol measurement display function and 2 patrol speed selectable.
- Supports E5 DIN rail mounted panel, can be edited directly by handheld display E8.

PANEL SIZE











A (size: 96*96mm)

B (sizez: 160*80mm)

C (size: 80*160mm)













E5 (DIN rail mounted)





F (size: 96*48mm)



MODEL SELECTION AND SPECIFICATIONS

| Al- | | | | | | | | Specifications |
|-------------------------|--------|----|-----|-----|---------------------------------|---|-------|---|
| Model | 702M | | | | | | | 2-channel indicator with alarm, retransmission, communication functions |
| | 704M | | | | | | | 1-4 channels indicator with alarm, retransmission, communication functions |
| | 704M2 | | | | | | | 1-4 channels indicator with alarm, retransmission, communication functions(input signal isolated) |
| | 706M | | | | | | | 1-6 channels indicator with alarm, retransmission, communication functions |
| | А | | | | | | | 96*96*100mm |
| | B C | | | | | | | 160*80*100mm |
| Panel | | | | | | | | 80*160*100mm |
| i anci | 1 3126 | Е | | | | | | 48*96*100mm |
| | | E5 | | | | | | 48*96*100mm, DIN rail mounted type |
| | | F | | | | | | 96*48*100mm |
| | | | J0 | | | | | 1 channel three-wire RTD input (or 1 thermocouple + 1 two-wire RTD inputs) |
| MIO CHANNEL1(M1) | | | J1 | | | | | 2 channels thermocouple or mV signal inputs |
| | | | J2 | | | | | 2 channels 2-wire RTD inputs |
| | | | J3 | | | | | 2 channels 0~3V, 0~5V, 1~5V voltage input |
| | | | J31 | | | | | 2 channels 0~10V voltage input |
| | | | J4 | | | | | 2 channels current inputs, supports 0~10mA, 4~20mA, 0~20mA current input |
| | | | J5 | | | | | 2 channels two-wire transmitter inputs with 24V feed power supply |
| JO | | | | | | | | 1 channel three-wire RTD input (or 1 thermocouple + 1 two-wire RTD inputs) |
| | | | | J1 | | | | 2 channels thermocouple or mV signal inputs |
| MIO CHANNEL2(M2) | | | | J2 | | | | 2 channels 2-wire RTD inputs |
| | | | 2) | J3 | | | | 2 channels 0~3V, 0~5V, 1~5V voltage input |
| | | | , | J31 | | | | 2 channels 0~10V voltage input |
| | | | | J4 | | | | 2 channels current inputs, supports 0~10mA, 4~20mA, 0~20mA current input |
| | | | | J5 | | | | 2 channels two-wire transmitter inputs with 24V feed power supply |
| J0-J5 L0 | | | | | | | | same as M1 |
| | | | | | | | | large volume relay contact output (250VAC/2A) (Chinese brand) |
| MIO CHANNEL3(M3)OR MAIN | | | | | L2 | | | small volume relay contact output (250VAC/1A) (Omron brand) |
| OUTPUT(OUTP) | | | | | L3 | | | dual channel N/O relay contact output (250VAC/2A) (Chinese brand) |
| | | G | | | SSR voltage output (12VDC/30mA) | | | |
| X3/X5 | | | | | | | | linear current 4-20mA output (X3occupy internal power supply,X5with isolated power supply) |
| Alarm (ALM) L0-L3 | | | | | | | | same as OUTP |
| | | | | | | | L0-L3 | same as OUTP |
| Communication (COMM) | | | | | |) | S4 | RS485 communication interface (S4 has own isolate power supply) |
| | | | | | | | X3/X5 | linear current 4-20mA output (X3occupy internal power supply,X5with isolated power supply) |

ATTENTION: Input specification for AI-704M2 can only be thermocouple.

MODEL SELECTION

AI-706MAJ1J1J1L3L3S

<u>AI-706M</u> <u>A</u> <u>J1 J1 J1 <u>L3 L3 S</u> <u>S</u></u>

- ① Main model for instrument is Al-706M, 1-6 channels indicator with alarm, retransmission, communication functions.
- ② Front panel size is A 96*96mm.
- ③ J1 module in M1, M2, M3 means 6 channels thermocouple input.
- ④ Both ALM and AUX are installed with L3 module which means 4 channels alarm relay output.
- $\ensuremath{\mathfrak{D}}$ S in COMM which means instrument supports RS485 communication.

WIRING DIAGRAM

