

Z-3RTD / Z-4RTD



3 or 4 resistance thermometer input module

Z-8AI



8 analogue input module (current or voltage)

Z-3AO



3 analogue output module

| ORDER CODE | Z-3RTD Z-4RTD | Z-8AI | Z-3AO |
|------------------------------------|---|--|---|
| SIGNALS | | | |
| INPUTS / OUTPUTS / FEATURES | <ul style="list-style-type: none"> PI100 input: Three measurement scales (as per ITS-90 tables): -200÷450°C: measurement current: 800_μA -200÷850°C: measurement current: 600_μA -200÷200°C: measurement current: 850_μA Linearisation polynomial as per DIN or ANSI specifications. Resolution 15 bit. Ni100 input: -60÷180°C as per ITS-90 tables. Measurement current: 800 μA | <ul style="list-style-type: none"> 8 single-ended inputs, which can be connected in pairs as Differential inputs. Input impedance Differential Mode: 200 KΩ. Single Ended Mode: 100 KΩ. Max common mode voltage: 20 Vdc Input protection: max tension permitted 30 Vdc Selectable full scales of ± 2.5 Vdc, ± 5 Vdc & ± 10 Vdc Measurement Accuracy Accuracy: 0.1% of full scale Resolution 15 bit (14 + sign) Thermal drift: < 200 ppm/°C | <ul style="list-style-type: none"> 2 active current output 0/4..20mA (Max load: 500 Ω) 1 current input that can be convert in tension by dip-switch. Resolution: 12 bit on 0..20 mA (= 5μA), 0..10 V (= 2.5 mV), 0..5V (= 1.25 mV). Precision: <0.2 % on full scale. For current output, <0.3% on full scale for tension output. Thermal stability: <0,01%°C for current output, <0,02%°C for tension output. Linearity stability: <0,01% Outputs have the negative terminal in common. Transient overload protection 400W/ms. |
| COMMUNICATION | | | |
| INTERFACE | 2 wire RS485 | 2 wire RS485 (bus) RS232 (programming mode) | 2 wire RS485 (bus) RS232 (programming mode) |
| PROTOCOL | ModBUS RTU Slave | ModBUS RTU Slave | ModBUS RTU Slave |
| PARITY | None, Even & Odd selectable | None, Even & Odd selectable | None, Even & Odd selectable |
| SPEED | 4.800..57.600 bps | 1.200, 2.400, 4.800, 9.600, 19.600, 38.400, 57.600 bps | 1.200, 2.400, 4.800, 9.600, 19.600, 38.400, 57.600 bps |
| COMMS DISTANCE (MAX) | 1,200 m | 1,200 m | 1,200 m |
| SAMPLING TIME | < 500 ms (for all channels) | < 500 ms (for all channels) | < 500 ms (for all channels) |
| COMMUNICATION TIME | Turn round time: < 20 ms @38400 bps | Turn round time: < 20 ms @38400 bps | Turn round time: < 20 ms @38400 bps |
| SOFTWARE & PROGRAMMING | For Parameter setting (Filter time, input type, scaling, serial interface and address). | For Parameter setting (Filter time, input type, scaling, serial interface and address). | For Parameter setting (Filter time, input type, scaling, serial interface and address). |
| GENERAL INFORMATIONS | | | |
| POWER SUPPLY | <ul style="list-style-type: none"> 12..40 Vdc 19..28 Vac 50-60 Hz | <ul style="list-style-type: none"> 10..40 Vdc 19..28 Vac 50-60 Hz | <ul style="list-style-type: none"> 10..40 Vdc 19..28 Vac 50-60 Hz |
| POWER CONSUMPTION | 1.4 W max | 0.5 W max | 1.8 W |
| GALVANIC ISOLATION | <ul style="list-style-type: none"> 1,500 Vac power/bus/outputs 500 Vac between inputs | <ul style="list-style-type: none"> 1,500 Vac power/bus/outputs | <ul style="list-style-type: none"> 1,500 Vac power/bus/outputs |
| TRANSDUCER POWER SUPPLY | none | none | none |
| FRONT PANEL INDICATION LEDS | <ul style="list-style-type: none"> Power On Failure / Error Transmit Data (Tx) Receive Data (Rx) | <ul style="list-style-type: none"> Power On Failure / Error Transmit Data (Tx) Receive Data (Rx) | <ul style="list-style-type: none"> Power On Failure / Error Transmit Data (Tx) Receive Data (Rx) |
| OPERATING TEMP. | 0 to +55 °C | 0 to +55 °C | 0 to +55 °C |
| STORAGE | -20 to +70 °C | -20 to +70 °C | -20 to +70 °C |
| MAX HUMIDITY | 90% @ + 40 °C non condensing | 30 to 90 % @ 40 °C non condensing | 30 to 90 % @ 40 °C non condensing |
| PROTECTION | IP20 | IP20 | IP20 |
| CONNECTIONS | Screw clamp, plug in connectors (2.5 mm ² max) | Screw clamp, plug in connectors (2.5 mm ² max) | Screw clamp, plug in connectors (2.5 mm ² max) |
| MOUNTING | 35mm symmetrical DIN rail | 35mm symmetrical DIN rail | 35mm symmetrical DIN rail |
| DIMENSIONS | 17.5 x 100 x 112 mm | 17.5 x 100 x 112 mm | 17.5 x 100 x 112 mm |
| HOT SWAPPING | yes | yes | yes |
| WEIGHT | 200 g | 200 g | 200 g |
| STANDARDS | EN 50081-2, EN 61000—6-2, EN61010-1 | EN 50081-2, EN 55011, EN 50082-2, EN 61000-2-2/4, EN 50140/141 | EN 50081-2, EN 55011, EN 50082-2, EN 61000-2-2/4, EN 50140 |