

Z-8NTC

8-CH NTC MODULE WITH MODBUS RTU PROTOCOL

Highlights

- **Power supply: 10..40 Vdc, 19..28 Vac**
- **Isolation: 1.5 kVac at 3-way**
- **Input: 8-CH NTC channels**
- **Resistance Conversion into temperature with Steinhart-Hart • equation**
- **Resolution: 16 bit, min. 0,02% f.s**
- **Accuracy Class: 0.5%**
- **Operating temperature: -20 .. + 70 °C**
- **Quick and safe cabling through DIN rail**
- **ModBUS RTU /RS485 serial communication**
- **Front MicroUSB connector**
- **Settings: DIP switch and software (EASY SETUP)**

Z-8NTC is a data acquisition module up to 8 channels for NTC (Negative Temperature Coefficient) sensors measurement. The The instrument is 3-way isolated up to 1.5 kV from power supply and from the serial communication line. Z-8NTC is characterized by 16- bit A / D conversion on three adjustable scales (100 Ω - 10 kΩ, 1 kΩ -100 kΩ, 5 kΩ - 500 kΩ) and 0,5% accuracy class on resistance value.

Reading value is available in resistance (Ω) or temperature (° C, ° F, ° K) format on full or float 32-bit, direct or swapped.

The module enables temperature resistance conversion with Steinhart-Hart equation and its linearization through configuration software (EASY SETUP). It also allows the possibility to enable and configure single channels and a programmable filter for reading stabilization. Time conversion is equal to 500 ms for all channels and rejection at 50/60 Hz.

Wiring of power and serial communication is quick and safe through the bus system housed in the DIN rail.

The communication parameters can be configured via DIP switches or via software. Z-8NTC has RS485 serial communication port with ModBUS RTU protocol and Micro USB front port for configuration.

100% Made & Designed in Italy

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Z-8NTC

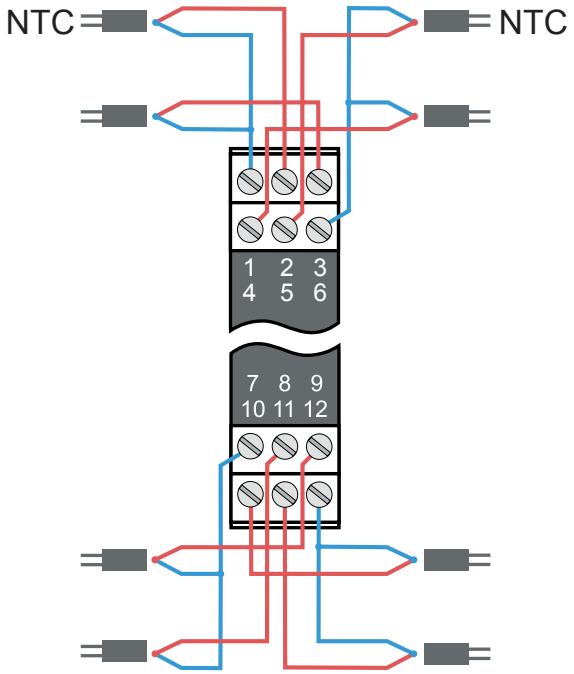


8-CH NTC MODULE WITH MODBUS RTU PROTOCOL

TECHNICAL DATA

GENERAL DATA	
Power Supply	10..40 Vdc, 19..28 Vac 50..60 Hz
Max consumption	TBD
Isolation	1.500 Vac a 3 vie
Led Status Indicators	Power Supply Error Tx Rx
Protection degree	IP20
Operating temperature	-20..+70°C
Dimension	17,5x100x112 mm
Weight	Approx 140 g
Case	Nylon 6, 30% fiberglass filled self extinguishing class V0.
Connection	Removable terminals with section of 2.5 mm^2 IDC10 rear connector for DIN rail RS232 connection on front from 3,5 mm jack connector Nr.1 micro USB 2.0
Mounting	On 35 mm rail DIN 46277
Programming	System software (Z-NET4) Plug&Play configurator (EASY SETUP) DIP switch
Data memory	Set up parameters stored in EEPROM with 10 years retention
COMMUNICATION	
Interfaces	Nr.1 RS485 2 wires; Nr.1 Micro USB
Data rate	Up to 15.200 bps
Protocols	ModBUS RTU slave
Communication time	< 10 ms (@38.400 ms)
Max distance	Up to 1.200 m
Connectivity	Max 32 nodes
I/O DATA	
Nr. Channels	8 inputs
Type	Generic NTC, curve defined by user. Rated values 1K, 10K, 50K @25°C; Resistance from 100 Ohm to 10 kOhm; from 1 kOhm to 100 KOhm; from 5 kOhm to 500 kOhm.
Resolution	16 bit
Accuracy class	0,5%
Thermal drift	< 100 ppm/K
STANDARD	
Approvals	CE
Norms	EN 61000-6-4, EN 61000-6-2, EN 61010, EN 60742

APPLICATION



ORDER CODES

Code	Description
Z-8NTC	8-CH NTC module with ModBUS RTU protocol
ACCESSORIES	
CU-A-MICROB	USB cable plug USB-A - MicroUSB-B - 5P
Z-PC-DIN2-17.5	2 slot 17.5mm DIN rail bus system for fast mounting and connection
Z-PC-DIN8-17.5	8 slot 17.5mm DIN rail bus system for fast mounting and connection
Z-PC-DINAL2-17.5	Head terminal + 2 slot 17.5mm DIN rail bus system
Z-POWER-115-15VA	DIN rail 19 Vac, 115 / 15 VA Voltage Transformer
Z-POWER-230-15VA	DIN rail 19 Vac, 230 / 15 VA Voltage Transformer
Z-POWER-230-25VA	DIN rail 19 Vac, 115 / 25 VA Voltage Transformer
Z-SUPPLY	24V @ 1,5 A Single-phase switching power supply
SOFTWARE	
EASY SETUP	SENECA programmable devices plug&play configuration suite

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