

# Z-PC LINE CANopen Analog I/O modules

## ZC-4RTD

4-CH RTD Input module / CANopen



Power Supply  
Isolation  
Accuracy  
A/D resolution  
Channels  
Input Range

10..40 Vdc, 19..28 Vac

1,5 kVac (6 way)

0,05%

14 bit

4

Pt100 (-200..+650°C); Pt500 (-200..+750°C)

Pt1000 (-200..+210°C); Ni100 (-60..+250°C)

< 20 ms

Response time

Supported Protocols

CAN bus standard (2.0A), CANopen (CiA 401 v.2.01)

Dip-Switches

Baud rate and ID Node configuration

Operating Temperature

-10..+65°C

Dimension (W\*H\*D)

17,5 x 100 x 112 mm



➔ For additional information please refer to [www.seneca.it](http://www.seneca.it)

# ZC-4RTD

4-CH RTD Input module | CANopen



## ORDER CODES

<b>Model</b>	<b>ZC-4RTD</b>	4-CH RTD input (Pt100, Ni100, Pt500, Pt1000) CANopen, 10..40 Vdc / 19..28 Vac
<b>Accessories</b>	<b>Z-PC-DINAL2-17.5</b> <b>Z-PC-DIN2-17.5</b> <b>Z-PC-DIN8-17.5</b> <b>PM001601</b>	Terminal block for power / bus + 2 slot 17.5 mm 2 slot block 17.5 mm 8 slot block 17.5 mm Programming serial cable Jack / DB9F
<b>Configuration</b>		EDS File (Electronic Data Sheet) free on <a href="http://www.seneca.it">www.seneca.it</a>

## TECHNICAL FEATURES

### GENERAL DATA

<b>Power Supply</b>	10..40 Vdc; 19..28 Vac
<b>Max consumption</b>	1 W
<b>Isolation</b>	1,5 kVac (6 way)
<b>Input Protection</b>	Against ESD up to 4 kV
<b>Rejection</b>	Settable 50 or 60 Hz
<b>Status indicators (LED)</b>	Power Supply, communication, fault
<b>Dimension (WxHxD)</b>	17,5 x 100 x 112 mm
<b>Enclosure, weight, color</b>	PBT, 140 g, black
<b>Operating temperature</b>	-10..+65°C
<b>Connection</b>	Screw-fit removable for wires up to 3.5 mm IDC10 Back connector for DIN rail frontal Jack RS232 (ModBUS) (COM) connection
<b>Protection degree</b>	IP20
<b>Configuration</b>	DIP switches (baud rate, ID Node) EDS IEC 61131
<b>Supported Protocols</b>	CAN bus standard (2.0A) CANopen (profile CiA 401 v.2.01) ModBUS RTU (via RS232)
<b>Max CANopen Speed</b>	1 Mbps
<b>Norms &amp; Approvals</b>	CE, EN 61000-6-4, EN 64000-6-2, EN 61010-1 CAN 2.0A CiA 401 v.2.01 IEC EN 61131-2

### INPUT DATA

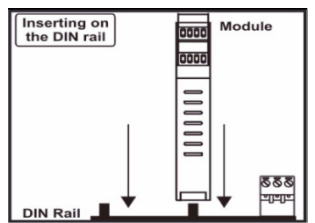
<b>Channels</b>	4 RTD input isolated, 2, 3, 4 wires
<b>Pt100 [EN 60751/A2(ITS-90)]</b>	-200..+600°C, resistance 18,5..300 Ω
<b>Pt1000 [EN 60751/A2(ITS-90)]</b>	-200..+210°C, resistance 18,5..1.800 Ω
<b>Pt500 [EN 60751/A2 (ITS-90)]</b>	-200..+750°C, resistance 92,5..1.800 Ω
<b>Ni100</b>	-60..+250°C, resistance 69..295 Ω
<b>Resolution</b>	13 or 14 bit
<b>Thermal Derivation</b>	< 50 ppm/°C
<b>Accuracy</b>	0,05%
<b>Sampling Frequency</b>	11..48 Hz

### CANOPEN FEATURES

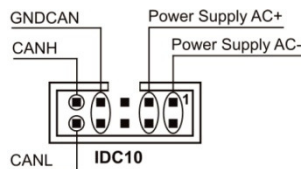
<b>NMT</b>	Slave
<b>Error control</b>	Node guarding
<b>Node ID</b>	Software, DIP-switch
<b>Nr PDO</b>	RX 5
<b>PDO Modes</b>	Event Triggered, Sync (cyclic), Sync (acyclic)
<b>PDO linking</b>	Yes
<b>PDO mapping</b>	Variable
<b>Nr SDO Server</b>	1
<b>Emergency Messages</b>	Yes
<b>Application layer</b>	CiA 301 v. 4.02
<b>Profile</b>	CiA 401 v. 2.01

## ELECTRICAL CONNECTIONS

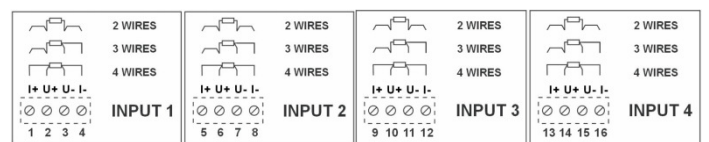
### Module insertion on DIN guide 46277



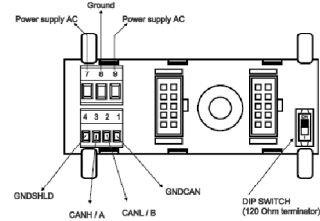
### IDC10 Back Connector



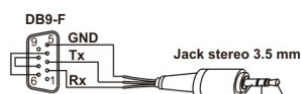
### RTD Inputs



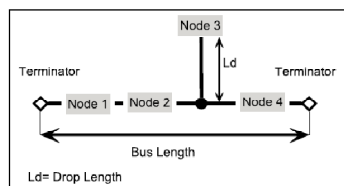
### Backplane bus Z-PC DIN



### RS232 – DB9F / Jack stereo Serial connection



### CANbus Connection Norms



Baud rate	Lunghezza bus	Lunghezza derivazione
20 kbps	1000 m	150 m
50 kbps	1000 m	60 m
125 kbps	500 m	5 m
250 kbps	250 m	5 m
500 kbps	100 m	5 m
800 kbps	50 m	3 m
1000 kbps	25 m	0.3 m



via Germania, 34 • 35127 Padova - Italy - Ph +39 049 87.05.359 (.408)  
Fax +39 049 87.06.287 • [www.seneca.it](http://www.seneca.it) • [info@seneca.it](mailto:info@seneca.it)

Document subject to modifications and revisions. Reproduction forbidden if not authorized.

ZC-4RTD\_0908EN