

Z-PC LINE CANopen Analog I/O modules

ZC-8TC

8-CH Thermocouple Input module / CANopen



Power Supply
Isolation
Accuracy
A/D resolution
Channels
Thermocouple

10..40 Vdc, 19..28 Vac

1,5 kVac (6 way)

0,1%

15 bit

8

Type J,KE,N,S,R,B,T (EN 60584-1); span -10,1..81,4 mV
impedance 10 M Ω

< 40 ms (for 8 thermocouples)

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



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8-CH Thermocouple Input module / CANopen



ORDER CODES

Model	ZC-8TC	Modulo 8-CH Thermocouple Input module / CANopen, 10..40 Vdc / 19..28 Vac
Accessories	Z-PC-DINAL2-17.5 Z-PC-DIN2-17.5 Z-PC-DIN8-17.5 PM001601	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
Configuration		EDS File (Electronic Data Sheet) free on www.seneca.it

TECHNICAL FEATURES

GENERAL DATA

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

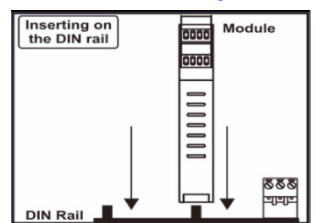
Channels	8 (thermocouple or mV)
Tipo termocoppia	J,K,E,N,S,R,B,T; EN 60584-1 (ITS-90)
Span mV	-10,1 mV..+81,4 mV
Impedance	10 MΩ
A/D resolution	15 bit
Thermal drift	< 100 ppm/°C
Accuracy	0,1%
Cold junction error	< 1°C
Linerizing error	< 0,05°C

CANOPEN FEATURES

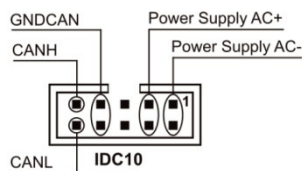
NMT	Slave
Error control	Node guarding
Node ID	Software, DIP-switches
Nr PDO	RX 5
PDO Modes	Event Triggered, Sync (cyclic), Sync (acyclic)
PDO linking	Yes
PDO mapping	Yes, Variable
Nr SDO Server	1
Emergency Messages	Yes
Application layer	CiA 301 v. 4.02
Profile	CiA 401 v. 2.01

ELECTRICAL CONNECTIONS

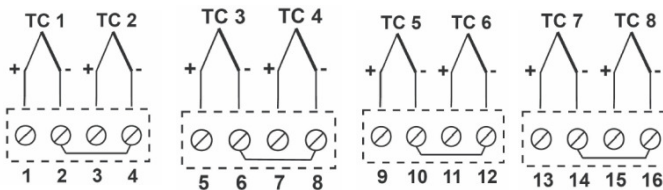
Module insertion on DIN guide 46277



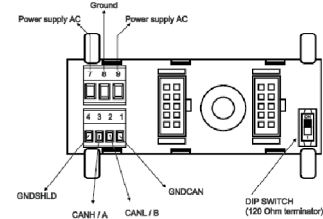
IDC10 Back Connector



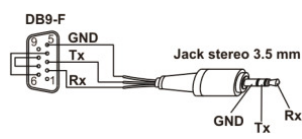
TC Inputs (J,K,E,N,S,R,B,T)



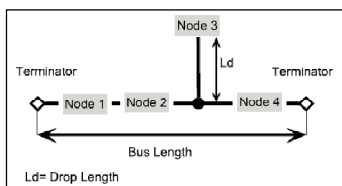
Backplane bus Z-PC DIN



RS232 – DB9F / Jack stereo Serial connections



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



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