

Z-PC LINE CANopen Analog I/O modules

ZC-SG

Strain gauge input module / CANopen



CE

CANopen  IEC 

Power Supply
Isolation
Response time
Strain gauge

10..40 Vdc, 19..28 Vac

1,5 kVac (3 way)

0,01%

5 Vdc power, min impedance 87 Ω (350 Ω ,
4 cells), 4 or 6 wires connection, sensitivity from 1 to 64 mV

Digital input
Digital output
Response time
Supported protocols
Dip-Switches
Operating temperature
Dimensions (W*H*D)

Tare calibration / span

Stable weight / threshold

7 ms

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

Baud rate and ID Node configuration

-10..+65°C

17,5 x 100 x 112 mm



➔ For additional information please refer to www.seneca.it

ZC-SG

Strain gauge input module / CANopen



ORDER CODES

Model	ZC-SG	Strain gauge 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 Strain gauge powered by the device
Max consumption	2 W
Isolation	1,5 kVac (3 way)
Input protection	Against ESD up to 4 kV
Rejection	Settable 50 or 60 Hz
Status indicators (LED)	Power, communication, fault
Dimensions (WxHxD)	17,5 x 100 x 112 mm
Housing, weight, colour	PBT, 140 g, black
Operating temperature	-10..+65°C
Connections	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, Node ID) EDS IEC 61131 (setting, stable weight, alarm, threshold, remote writing)
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 / OUTPUT DATA

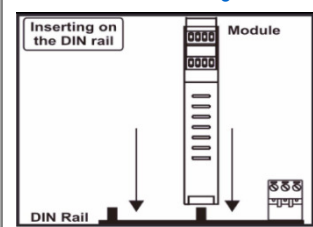
Channels	1 analog / 1 digital
Analog input	Differential measure at 4 / 6 wires (± 5 mV.. ± 320 mV)
Strain gauge	Voltage supply 5 Vdc Min input impedance 87 Ω Sensitivity from ± 1 mV/V to ± 64 mV/V
ADC	24 bit
Thermal drift	< 25 ppm/°C
Precision	0,01%
Sampling frequency	12,53..151,71 Hz

CANOPEN FEATURES

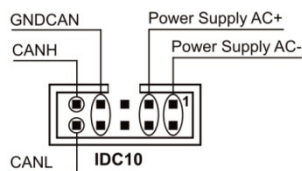
NMT	Slave
Error control	Node guarding
Node ID	Software, DIP-switches
Nr PDO	RX 5
PDO mode	Event Triggered, Sync (cyclic), Sync (acyclic)
PDO linking	Yes
PDO mapping	Variable
Nr SDO Server	1
Emergency messages	Yes
Application layer	CiA 301 v. 4.02
Profile	CiA 401 v. 2.01

ELECTRICAL CONNECTIONS

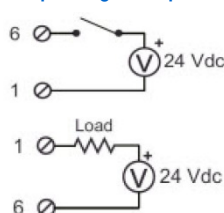
Module insertion on DIN guide 46277



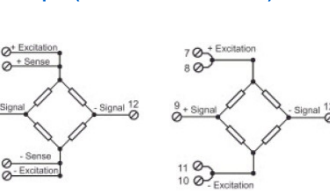
IDC10 Back Connector



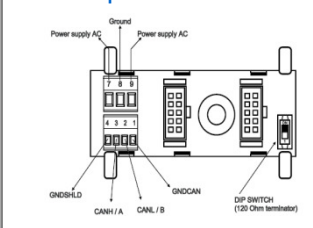
Input / Digital output



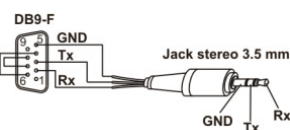
Input (4 / 6 wires connection)



Backplane bus Z-PC DIN



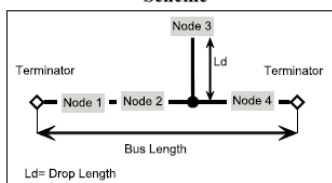
RS232 – DB9F / Jack stereo Serial connection



CANbus connection

Baud rate	Bus Length	Drop length
20 kbps	2500 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

Scheme



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

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