

Z109TC2-1

THERMOCOUPLE TO DC ISOLATOR / SIGNAL CONVERTER WITH MICRO USB INTERFACE

Highlights

- Power Supply Vac/dc
- Selectable input TC type (J,K,E,N,R,S,B,T)
- Selectable output mA, V
- Sampling frequency from 240 sps (@11bit+sign resolution) to 15 sps (@15 bit +sign resolution)
- Isolation 1.500 Vac at
- 3-ways power supply /input / output
- Setting via DIP switches, software or APP
- Micro USB connector (front side)
- Operating temperature -20...+60°C
- UL Certification

Z109TC2-1 is a temperature converter for Thermocouple J,K,E,N,S,R,B,T type. It provides a mA/V standard output signal. A 3-way galvanic isolation among power supply // input // output circuits assures the integrity of your signals.

Z109TC2-1 offers high accuracy class (0,1%), fast response time (up to 35 ms), wide operating temperature range and low power consumption. Besides DIP-switch settings, the module has a Micro USB connector on the front side and can be configured by PC software (EASY SETUP) or dedicated app for Android devices setting: start / end scale, additional input types, square root extraction, filter, burnout etc.

Z109PT2-1 is certified in accordance with UL standard



SENECA
www.seneca.it

Z109TC2-1



THERMOCOUPLE TO DC ISOLATOR / SIGNAL CONVERTER WITH MICRO USB INTERFACE



TECHNICAL DATA

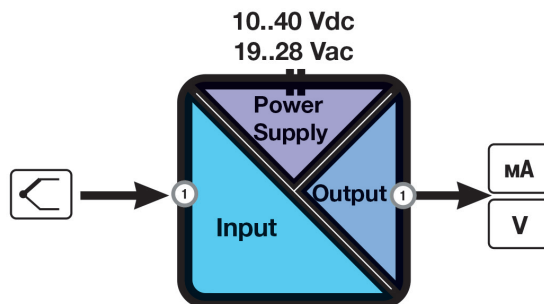
GENERAL DATA	
Power Supply	10..40 Vdc; 19..28 Vac
Max consumption	2,5 W
Isolation	1.500 Vac (@3 ways)
Protection degree	IP20
Pollution degree	2
LED status indicators	Power Supply Error Out of scale
Response time	35..140 ms
Interface	Micro USB (front panel)
Accuracy Class	0,1% (TC) - 0,3% (voltage output)
Thermal Drift	0,01%/°K
Setting	DIP switch Software (EASY SETUP) APP Android (EASY SETUP APP)
Data Memory	EEPROM, 40 years retention time
Operating temperature	-10..+60°C
Dimension	17,5 x 100 x 112 mm
Connection	Screw removable terminals pitch 5,08 mm, section 2,5 mm ²
Case	Nylon 6 30% fiber glass
Mounting	35 mm DIN rail (IEC/EN 60715)
Weight	200 g
Approvals	CE, UL UR CSA
Norms	EN 61000-6-4, EN 61000-6-2, EN 61010-1

INPUT DATA	
Channels	1
Type	Thermocouple Type: J, K, R, S, T, E, B, N Resolution 5 µV Automatic detection of cable interruption Sampling frequency from 240 sps (@11bit+sign) to 15 sps (@15bit+sign) Response time from 35 ms (@11bit+sign) to 140 ms (@15bit+sign)

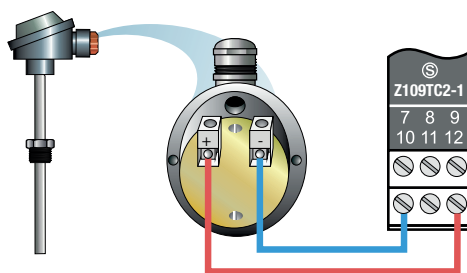
DATI DI USCITA	
Channels	1
Type	VOLTAGE (V) 4 scales: 0..5, 1..5, 0..10, 2..10 V Min load impedance KΩ Resolution: 0,025%..0,032 % CURRENT (mA) Active / passive connection 2 scales: 0..20, 4..20 mA Max load impedance: 600 Ω Resolution: 0,025%..0,032 %

ORDER CODES	
Code	Description
Z109TC2-1	Thermocouple to DC isolator / signal converter with Micro USB interface
CU-A-MICROB USB-A	Micro USB-B 5 P plug cable
CU-A-MICRO-OTG	Micro USB OTG to USB Type A (female) adapter cable
EASY SETUP	Plug&Play software suite for SENECA programmable instruments
EASY SETUP APP	App iOS / Android EASY SETUP suite
Z-POWER-115-15VA	DIN rail 19 Vac transformer, 115 / 15 VA with thermofuse
Z-POWER-230-15VA	DIN rail 19 Vac transformer, 230 / 15 VA with thermofuse
Z-POWER-230-25VA	DIN rail 19 Vac transformer, 230 / 25 VA with thermofuse
Z-SUPPLY	Single-phase switching power supply 24V @ 1.5A

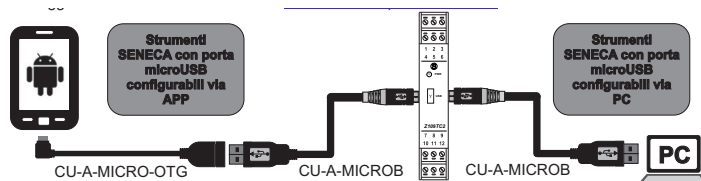
SIGNAL / ISOLATION DIAGRAM



APPLICATION EXAMPLE



SETTING BY USB INTERFACE



Via Austria, 26 • 35127 Padova - (I) - Tel. +39 049 87.05.359
 Fax +39 049 87.06.287 • www.seneca.it • info@seneca.it

Le informazioni riportate in questo documento potranno essere modificate o integrate senza preavviso per esigenze tecniche e commerciali. Le immagini e gli schemi proposti sono da ritenersi indicativi e non vincolanti. Neppure si possono escludere discordanze e imprecisioni nonostante la continua ricerca della perfezione. Il contenuto di questo documento è comunque sottoposto a revisione periodica. Riproduzione vietata se non autorizzata.



SCATTERGOOD & JOHNSON LTD

ELECTRICAL ENGINEERING & FLUID CONTROL DISTRIBUTORS

Est.1899

At Scattergood & Johnson Ltd, we pride ourselves on being a technical distributor to specialist industries.

Working with a range of quality product suppliers across a number of specialist markets, we are not your average 'box shifter' - we are your technical and supply chain partner.

We fully support every product we sell - for free! Our internal team and external sales engineers can answer any product or application question, no matter the complexity.

Backing up this technical ability is a range of 50,000+ products available from stock for nationwide next day delivery (same day if required!), or you can collect what you need from any of our trade counters around the UK.

Select your specialist interest below to learn more about how we can help.



Online, In Branch and On the Road - Scattergood & Johnson Ltd, there when you need us.

www.scatts.co.uk