



# Z-LINE

## Z109REG

Universal Converter

Z-LINE

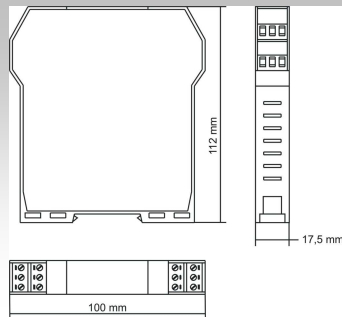
Standard converters



- ▶ INPUT: Voltage, Current, TC (J,K,R,S,T,B,E,N), PT100, Potentiometer
- ▶ OUTPUT: current 0..20, 4 . 20 mA  
voltage 0..5, 1..5, 0..10, 2..10 Vdc (scale inversion also)
- ▶ DIP-SWITCHES for selecting: input type, zero and span, output mode (zero elevation, scale inversion), output span
- ▶ Galvanic isolation @ 3-way
- ▶ Screw-fit terminals removable
- ▶ Din rail mounting
- ▶ Power supply: 19..40 Vdc, 19..28 Vac

# TECHNICAL DATA

## Z109REG – Universal Converter



### ORDER CODE

**Cod. Z109REG**

**Cod. Z109REG-ER** With square root extraction

#### Accessories

**SENECA-TOOL** Configuration Kit (software + cable)

**Z-SETUP** Configuration software (downloading from [www.seneca.it](http://www.seneca.it))

**PM001600** Configuration cable

### GENERAL FEATURES

<b>Power supply</b>	19+40Vdc, 19+28 Vac
<b>Channels</b>	N.1
<b>Status indicators</b>	- Power - Setting error - Off scale
<b>Galvanic Isolation</b>	Power supply // input // output at 1500 Vac, digital
<b>Hot swapping</b>	Yes
<b>Power consumption</b>	2,5 W
<b>Sampling frequency</b>	3 samples / second
<b>Protections</b>	Surges: 400W/ms. Loop supply short-circuit protected
<b>Protection for inputs</b>	Except current: 60V continuous; current 200mA continuous.
<b>Humidity</b>	30..90% a +40°C (not condensing)

<b>Design</b>	Terminal housing for mounting on 35 mm DIN 46277
<b>Data memory</b>	EEPROM for all configuration data; storage time: 10 years.
<b>DIP Switch</b>	- Inputs signal setup - Output signal setup
<b>Enclosure</b>	"V0" self-extinguishing glass filled nylon case
<b>Dimensions</b>	17,5 x 100 x 112 mm (w x h x d)
<b>Weight</b>	140 g
<b>Operating temperature</b>	0..50 °C
<b>Connections</b>	Plug-in screw clamp terminal blocks, wires up to 2.5 mm <sup>2</sup>
<b>Standards</b>	EN50081-2 EN50082-2 EN61010-1
<b>Approvals</b>	CE

### INPUT

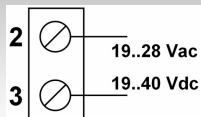
**Current:** bipolar up to 20mA, input impedance 2.5 ohm, resolution 2uA  
**Voltage:** bipolar up to 10Vcc in 4 scales: 200mV, 2V, 5V, 10V, input impedance 1 Mohm, resolution 0.01%  
**PT100:** 3-wire measurement, range -200..+600 °C, energising current 0.56mA, resolution 0.035 ohm, automatic detection of cable interruption or RTD  
**Thermocouple:** type J,K,R,S,T,B,E,N; resolution 5uV, automatic detection of TC interruption.  
**Potentiometer:** full scale min 500 ohm, max 15 Kohm, resolution 0.01%.

### OUTPUT

**Current:** 0..20 mA, 4..20 mA, 20..0 mA e 20..4 mA  
 Higher load resistance: 600 Ohm  
**Voltage:** 0..5 Vdc, 1..5 Vdc, 0..10 Vdc and 10..0 Vdc  
 Lower load resistance: 2,5 KOhm

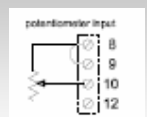
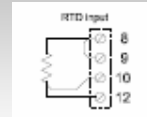
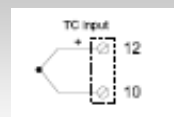
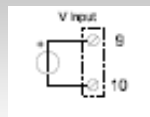
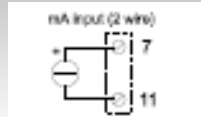
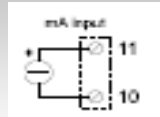
### DIMENSIONS AND INSTALLATION

#### Power supply



#### Input

Current – passive input    Current – active input    Voltage    Thermocouple    RTD    Potentiometer



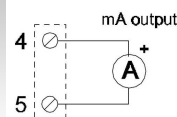
#### Setting

Dip switches configuration (input signal)

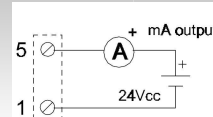
SW1	SW2
INPUT TYPE	ZERO SPAN
V	1 1 1
ohm	2 2 2
mA	3 3 3
PT100	4 4 4
Tc J	5 5 5
Tc K	6 6 6
Tc R	7 7 7
Tc S	8 8 8
Tc T	
Tc B	
Tc E	
Tc N	

#### Output

Current – active output



Current – passive output



Voltage

