

CZ110 - SELF POWERED CURRENT LOOP ISOLATOR

Galvanic separator powered with current input 4 ... 20 mA. CZ110 makes measurement and retransmission on isolated analog output, with current signal 4 ... 20 mA. Employed for the isolation of measurement signals between translators in the field and the acquisition instruments to avoid mutual interference or noise. Isolation input / output is 1500 Vac.

- CZ110S Single channel
- CZ110D Double channel



ELECTRICAL CONNECTIONS

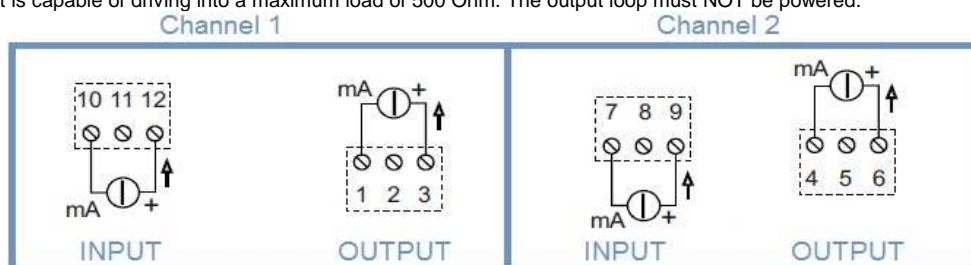
Screened cable is recommended for signal connections and the screen should be connected to the instrument earth. It is good practice to separate signal cables from power cables and to avoid potential sources of interference such as electric motors, variable speed drives, microwave ovens and induction.

Single Channel - PASSIVE INPUT: Connect the module in the current loop as shown. The module is powered by the 4 to 20mA current loop. Voltage Drop at 20mA: 3.8V plus Load Volt drop ($0.02 \times \text{load resistance}$), minimum 7V (e.g. with load of 250ohm Volt Drop is : $3.8V + (0.02 \times 250) = 8.80V$)

Single Channel - ACTIVE OUTPUT: The module generates a current in the output loop identical to the current in the input loop. It is capable of driving into a maximum load of 500ohm. The output loop must NOT be powered.

Double Channel - PASSIVE INPUT: Connect the module in the current loop as shown. The module is powered by the 4 to 20mA current loop. Voltage Drop at 20mA: 3.8V plus Load Volt drop ($0.02 \times \text{load resistance}$), minimum 7V (e.g. with load of 250ohm Volt Drop is : $3.8V + (0.02 \times 250) = 8.80V$)

Double Channel - ACTIVE OUTPUT: The module generates a current in the output loop identical to the current in the input loop. It is capable of driving into a maximum load of 500 Ohm. The output loop must NOT be powered.



TECHNICAL SPECIFICATIONS

Power supply:	from the 4-20 mA input loop
Isolation:	input/output 1500 Vac (2 way)
Power transducers:	No
Accuracy:	0.1%
Response time:	<100 mS to reach 90% of final value
Protection degree:	IP20
Input/Output protection:	Protected up to 35Vdc Max
Status indicators:	Power supply, error, data transmission, data reception, input status
Input:	Current: 4 - 20 Ma - Minimum Volt Drop at 20mA: 7V (all loads up to 160ohm) Maximum Volt Drop at 20mA $3.8V + (\text{Load Resistance}) \times 0.02V$
Output:	4 - 20 mA (active), max load resistance 500 ohm
Input measurement error (off f.s.):	calibration error = 0.1%; linearity error 0.1%; Thermal coefficient 0.02%/°C; Load variation effect 0.1%
Operating Temperature:	0...+50°C
Dimensions WxHxD:	17,5x100x112 mm
Enclosure:	glass filled nylon 6, V0 self-extinguishing
Mounting:	35 mm. DIN rail guide
Norms:	EN50081-2; EN55011; EN50082-2; EN61000-2-2/4; EN61010-1; EN40140/141



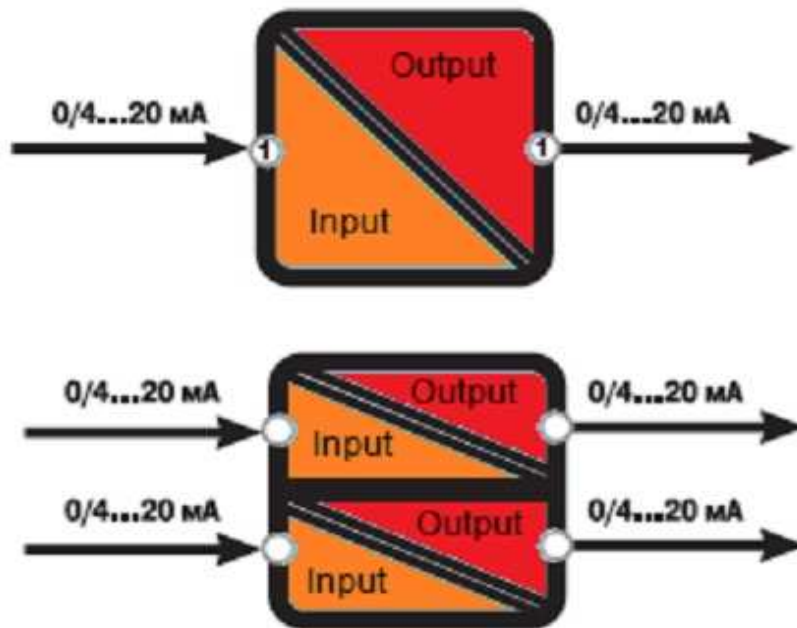
SATEMA

13856 VIGLIANO B.SE - Via Milano, 395

Tel. +39 015811102 - Fax 0158853029

Mail: info@satema.it <http://www.satema.it>

Functional diagram



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