

# INTELART

Robust in Automation

## SB-I1

Analog Input Signal Board

Technical Manual

[www.intelart.ir](http://www.intelart.ir)

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## Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

<b>DANGER</b>
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Indicates that death or severe personal injury will result if proper precautions are not taken.
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<b>WARNING</b>
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Indicates that death or severe personal injury may result if proper precautions are not taken.
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<b>NOTICE</b>
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Indicates that property damage can result if proper precautions are not taken.
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## Qualified personnel

The product/system described in this documentation may be operated only by personnel qualified for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions.

Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems

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# 1 Technical Specifications

## 1.1 Hardware Parameters

The following table specifies the hardware information of Signal Board.

Table 1 Hardware parameters

<b>Functional</b>	Available channels Count	2
	Measuring type	Linear DC: 0 to 10 V, 0 to 24 mA
	Sampling rate	25 ms
	Destruction limit (Voltage)	30 V
	Destruction limit (Current)	70 mA
	Input resistance (Voltage)	>145 k $\Omega$
	Input resistance (Current)	>250 $\Omega$
	Resolution	12 bit
	Measuring principle	Pseudo Differential
<b>Ambient Conditions</b>	Storage temperature	-15 to 75 °C
	Operating temperature	0 to 55 °C
	Relative Humidity	Max 90 %, No Condensation

# 2 Wiring

The following block diagram shows you information about wiring of the Signal Board.

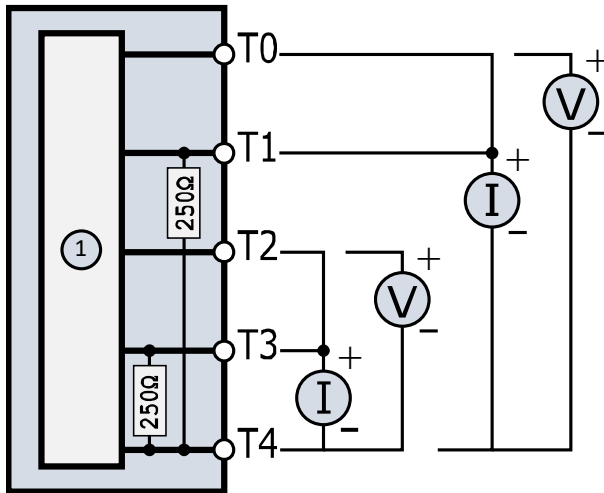


Figure 1 Wiring diagram and terminal assignments

- |                            |   |                                     |  |
|----------------------------|---|-------------------------------------|--|
| <p>①</p> <p><b>Ix:</b></p> | <p>Analog Signal Board</p> <p>Current Mode Wiring</p> | <p><b>Tx:</b></p> <p><b>Vx:</b></p> | <p>Analog Signal Board Terminal</p> <p>Voltage Mode Wiring</p> |
|----------------------------|---|-------------------------------------|--|