

Loadcell Input / Analog Output Module

Caution



1. The product/system described in this documentation may be operated only by personnel qualified for the

specific task in accordance with the relevant documentation. 2. 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.

- 1. Inspect wiring of equipment before each use. Replace damaged or frayed electrical cords immediately. Use a reliable power supply.
- Minimize the potential for dust, metallic particles, water or any chemical spills on or near the equipment.
 DO NOT disassemble or modify any part of the equipment.
- 4. DO NOT use and/or install the equipment in places with the following conditions:
- Humidity or temperature out of the specified range
 vibration or shock
 dust or corrosive gas or liquid
 DO NOT touch the cords, terminals or any electric part when the equipment power is on. Wait at least one minute after the power off to assure that all capacitors are discharged.

Hardware Parameters

Analog Inputs	Inputs count	1	
	Measuring type	Load Cell	
	Destruction limit (Voltage)	5 V	
	Sampling rate	100 ms	
	Resolution	20 bit	
	Measuring principle	Sigma-Delta	
Analog Outputs	Outputs count	1	
	Measuring type	Linear DC: 0 to 10 V, 0 to 24 mA	
	Min Load impedance (Voltage)	2 kΩ	
	Max Load impedance (Current)	300 Ω	
	Rated supply voltage	24 V	
	Supply voltage range	15 to 40 V	
	Resolution	12 bit	
	Hardware interrupt	Yes. Under flow, Over flow	
Ambient Conditions	Storage temperature	-15 to 75 °C	
	Operating temperature	0 to 55 °C	
	Relative humidity	Max 90 %, No Condensation	4
Miscellaneous	Weight	Approx. 90 g	
Hardware Interrupts	Inputs	Zero value	
	Outputs	Underflow, Overflow	

Stop action

Each output channel has a property named "StopAction" which determines the act of channel when PLC state changes to stop mode.

Smoothing

When you install an input analog signal board, a property named "Smoothing" will be appeared in properties window in order to enable some filtering and signal conditioning options.

Address Space

The value of input channels and output channels and some configurations will be accessible via an address space. There are bunch of predefined mapped tags in order to read or write a value in the address space. The following table illustrates the type and purpose of each mapped tag.

Category	Name	Data Type	Address	Function			
Input Space (I)							
Analog Inputs	AI00	REAL	%ID0	Gets the value of channel 0 value			
Output Space (Q)							
Analog Outputs	AQ00	REAL	%QD0	Sets the value of channel 0 value			

Diagnostic

technical sheet from

INTELART's

website

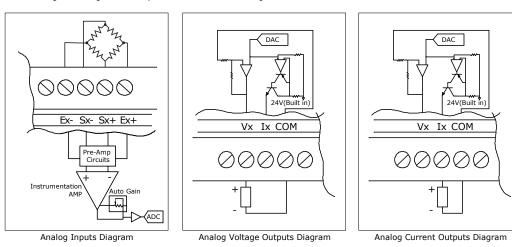
www.intelart.ir/catalog

All output channels has a LED indicating the status of that channel. The following table explains the states of each relevant LED.

LED	Indicating	Solution
D Off	Power missing or hardware failure.	Check the main power supply Verify that the module is installed correctly
On	The module is configured and is in RUN mode.	
₩ Flashes	Indicates an error (Out of range error, config- uration error etc.)	Verify that the module is installed correctly Ensure that the input or output value be in eligible range.

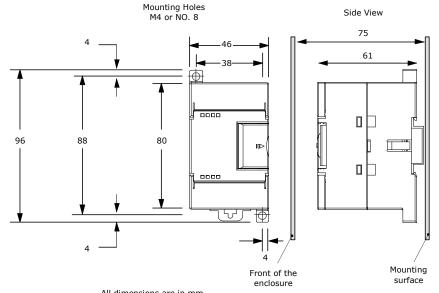
Wiring

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

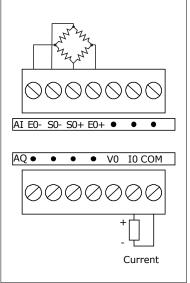


Dimensional Drawing

The dimensions of the module are available in this section. For install the module and its main device follow the below dimensional drawing.



All dimensions are in mm



Wiring Sample

May change without prior notice

Some parts may not included in diagrams