

# IOMod 8AI



## Features

- Data measurement in 16-bit resolution
- Fully configurable data scaling and casting
- Selectable input sensitivity
- Configuration over USB console
- Drag and Drop firmware upgrade over USB mass storage
- Modbus, IEC-60870-5-103 communication over RS485
- Software selectable 120Ω termination resistor for RS485
- LED indication for data transmission
- Easy connection with **WCC Lite** gateway and **CloudIndustries.eu** platform



## Concept

**IOMod 8AI** is a stand-alone Modbus (RTU) and IEC 60870-5-103 8 analog input device. Designed to measure voltage or current values with high accuracy in real-time. **IOMod 8AI** can be used for numerous applications where user needs to log Voltage or Current changes. **IOMod 8AI** can be used to measure temperature, pressure, water level or weight with corresponding sensors (e.g. 4-20mA). **IOMod 8AI** input measurement resolution, data scaling and data casting can be configured by user for each channel individually.

**IOMod 8AI** is an ideal solution for such applications as data acquisition, observation, control, process monitoring, testing and measurement remotely. It is controlled over Modbus or IEC 60870-5-103 protocol, and can be connected in parallel with other Modbus or IEC 60870-5-103 equipment in a multi-drop installation scheme such as any SCADA system.

When using **IOMod 8AI** with **WCC Lite** gateway, it is possible to monitor Voltage or Current values for each individual input over Ethernet LAN's or 3G/4G(LTE)/GSM/GPRS networks. It is a powerful solution for remote monitoring and control, alarm management and data logging of I/Os on **CloudIndustries.eu** cloud platform.

# Characteristics

## System

Analog inputs	8
PC USB connection	Mini USB
Input connectors	Screw terminal plug connector

## Software

Configuration	Over USB console
Firmware upgrade	Over USB mass storage

## Communication

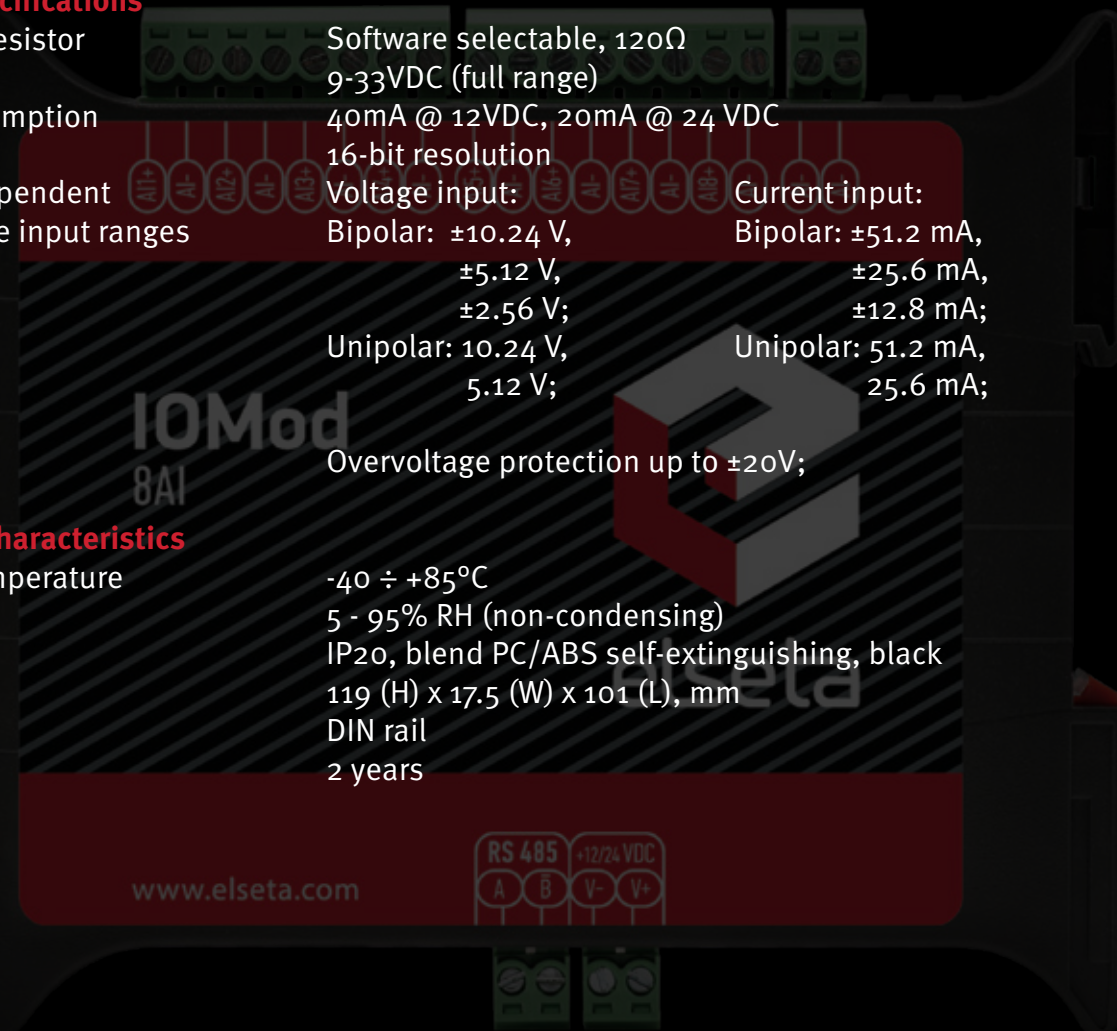
Communication standard	RS485
Communication protocol	Modbus (RTU) and IEC 60870-5-103
Speed	300 – 256000 baud

## Electrical Specifications

Termination resistor	Software selectable, 120Ω	
Power supply	9-33VDC (full range)	
Current consumption	40mA @ 12VDC, 20mA @ 24 VDC	
Inputs	16-bit resolution	
Channel-independent	Voltage input:	Current input:
Programmable input ranges	Bipolar: ±10.24 V, ±5.12 V, ±2.56 V; Unipolar: 10.24 V, 5.12 V;	Bipolar: ±51.2 mA, ±25.6 mA, ±12.8 mA; Unipolar: 51.2 mA, 25.6 mA;
	Overvoltage protection up to ±20V;	

## Mechanical Characteristics

Operating temperature	-40 ÷ +85°C
Humidity	5 - 95% RH (non-condensing)
Casing	IP20, blend PC/ABS self-extinguishing, black
Dimensions	119 (H) x 17.5 (W) x 101 (L), mm
Mounting	DIN rail
Warranty	2 years



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