

iSMA-B-MAC36NL

The iSMA-B-MAC36NL is a compact Master Application Controller with built-in different types of I/O and operating in Niagara Framework environment. Using the specific local I/O set 16x UI, 8x AO, 4x DI and 8x DO allows to use the device in different applications. The controller provides control, data logging, alarming, scheduling, integration and visualisation.

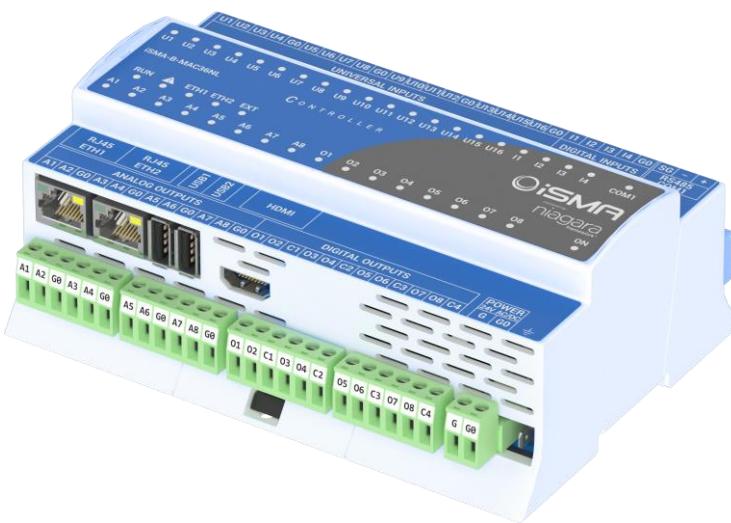
To allow IP connectivity there are **2x Fast Ethernet** ports which can operate as two independent ports. Built-in **1x RS485** can be used to expand number of I/O by connecting iSMA-B-MINI or iSMA-B-MIX series I/O modules or to integrate with other subsystems.

There is another hardware version of the controller with the second RS485 port available.

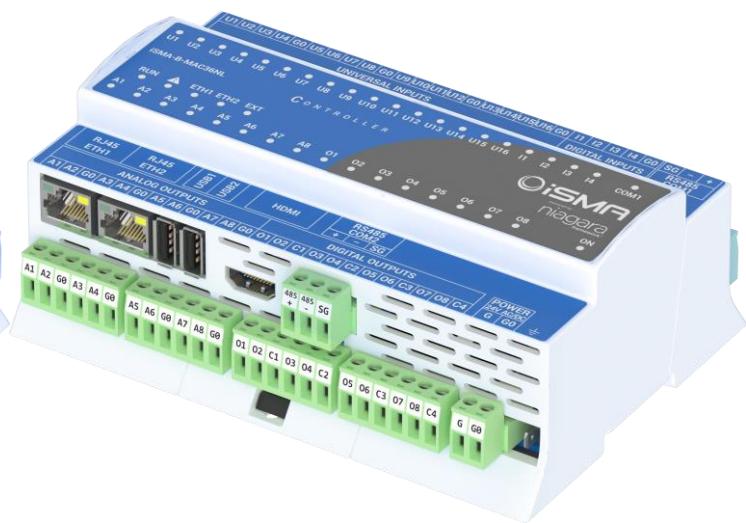
The **iSMA-B-MAC36NL** provides rich graphical interface displaying on a standard Web browser or on external display connected to built-in **HDMI** and **USB port** (touchscreen support).

Key Features

- Niagara 4.6, 4.7
- Real-time programming
- 2x Fast Ethernet (independent)
- 1x RS485 (opto-isolated)
- 2x USB (1x Host, 1x OTG, touchscreen support)
- 16x UI, 8x AO, 4x DI and 8x DO
- HDMI to connect external display
- Built-in Web server provides graphical User interface available from Web browser level
- SD card to collect real-time data, history and alarms
- Hardware replacement by SD Card
- 1x RS485 or 2x RS485 (optional hardware version)
- Different licensing models for various application types



iSMA-B-MAC36NL



iSMA-B-MAC36NL-RS

iSMA-B-MAC36NL

Specification

16x Universal Inputs (16UI)

All Universal Inputs have 16-bit ADC which support the following types of inputs:

- Temperature input supports the following types of sensors: series NTC 10K3A1, 10K4A1, Carel 10K, 20K6A1, 2.2K3A1, 3K3A1, 30K6A1, SIE1, TAC1, SAT1 and Pt1000, Ni1000

For sensors Pt1000 and Ni1000 use only 16-bit resolution

- Voltage input 0-10 V DC, input resistance 100 kΩ
- Current input 0-20 mA (external resistor 200 Ω required)
- Resistive input 0-1000 kΩ
- Dry contact input

4x Digital Inputs (4DI)

- Dry contact inputs
- Fast pulse counter up to 100 Hz saved on SD card

8x Analog Outputs (8AO)

All Analog Outputs are equipped with 12-bit ADC. They support the following output types:

- Voltage: 0-10 V DC max. load up to 20 mA
- PWM: 0,01 Hz, 0,1 Hz, 1 Hz, 10 Hz, 100 Hz

8x Digital Outputs (8DO)

- Relay Output (NO): max. 3 A @ 230 V AC and max. 3 A @ 30 V DC

Platform

- Multicore Cortex-A Series ARM Processor
- 1 GB DDR3 SDRAM
- Removable micro-SD card – 4 GB (2 GB system reserved/ 2 GB User storage)

Communication

- RS485 half-duplex, opto-isolated
- Baud rate from 2400 to 115200
- 2x Fast Ethernet (independent)
- 2x USB (1x Host, 1x OTG)
- HDMI type A (standard)
- Micro SD card slot
- Second RS485 port (option)

Protocols

- Modbus TCP
- Modbus RTU/ASCII
- BACnet IP
- BACnet MS/TP
- oBiX
- SNMP
- KNX IP
- M-Bus IP
- LON IP

Power supply

- 24 V AC/DC

Housing

- Dimension: 160x111x62 mm (6.3x4.4x2.45 in)
- Construction: UL approved, self-extinguishing plastic (PC/ABS)
- DIN rail mounting DIN (DIN EN 50022 norm)
- Cooling: passive external air circulation

Environment

- Operating temperature: 0°C to 50°C (32°F to 122°F)
- Storage temperature: -40°C to 85°C (-40°F to 185°F)
- Relative humidity: 5% to 95%, no condensation
- Ingress Protection Rating: IP30 – for indoor installation

