MaNima Module

DATASHEET

MaNima Pollux

- Redundant setup
- 8 PWM Outputs
- 8 Sensor Inputs
- Digital in-and outputs
- Built-in Ethernet Switch
- Measure Voltage and Current in real-time
- Firmware updates with Ethernet

Sensor Inputs

Measurements are possible with multiple sensor inputs. These readings can then be used for monitoring and conditions.

PWM output

There are 8 PWM outputs available on the MaNima Pollux. These can be used to control analogue LEDs or devices.

Custom Software

The MaNima Pollux can be customized to communicate with your specific system. Contact MaNima Technologies for more information.

Ethernet switch

The MaNima Pollux doubles as an ethernet switch. The two ethernet ports on the Pollux are of the same network.

Redundant setup

If the Pollux is used in an important installation that can't have malfunctions, it is possible to have a 2nd power source for the Pollux to ensure system reliability.

Easy-to-use GUI

The settings of the Pollux can easily be configured with the MaNima Configurator.

Digital/Potential inputs

There are 2 Digital/Potential inputs available on the MaNima Pollux. These can be used as triggers for actions.

Monitoring and the Cloud

The Pollux has been made with monitoring in mind. It is also possible to send this data to a cloud database.

Increased reliability and protection

The MaNima Pollux is able to measure the Current and Voltage going through the PWM outputs.

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Technical Specifications

Weight	*360 Gr*
Dimensions	*90 x 159 x 58 mm*
Mounting	*Din rail*
IP class	*IP10*
Wiring	*Max. 2.5mm2 | 14 AWG*
Connectors	*Ethernet Switch terminal connector:RJ45 bus, 2 x 9 pins terminal block, 3 x 6P6C*
Input voltage	*12-48V DC 200mA max*
Max. power consumption	*9.6W*
Ethernet	*RJ45 compatible, for 10/100 Base-TX Ethernet with Static IP address or DHCP*
Input	*DC1 12/48VDC power Inputs (20A) | DC2 12/48VDC power Inputs (20A) | 2 x Ethernet Inputs/outputs | 6 x NTC inputs | 2 x LDR input | 2 x Digital Input | (optional Wi-Fi module) | 4 additional GNDs*
Output	*2 x Ethernet Inputs/outputs |4 x DC1 PWM outputs (20A) |4 x DC2 PWM outputs (20A) |4 x Digital outputs*
Directives	*CE, RoHs*
Operating temperature	*10°C ~ 60°C*
Storage temperature	*10°C ~ 60°C*
Warranty	*5 Years*
Gui	*MaNima Configurator*

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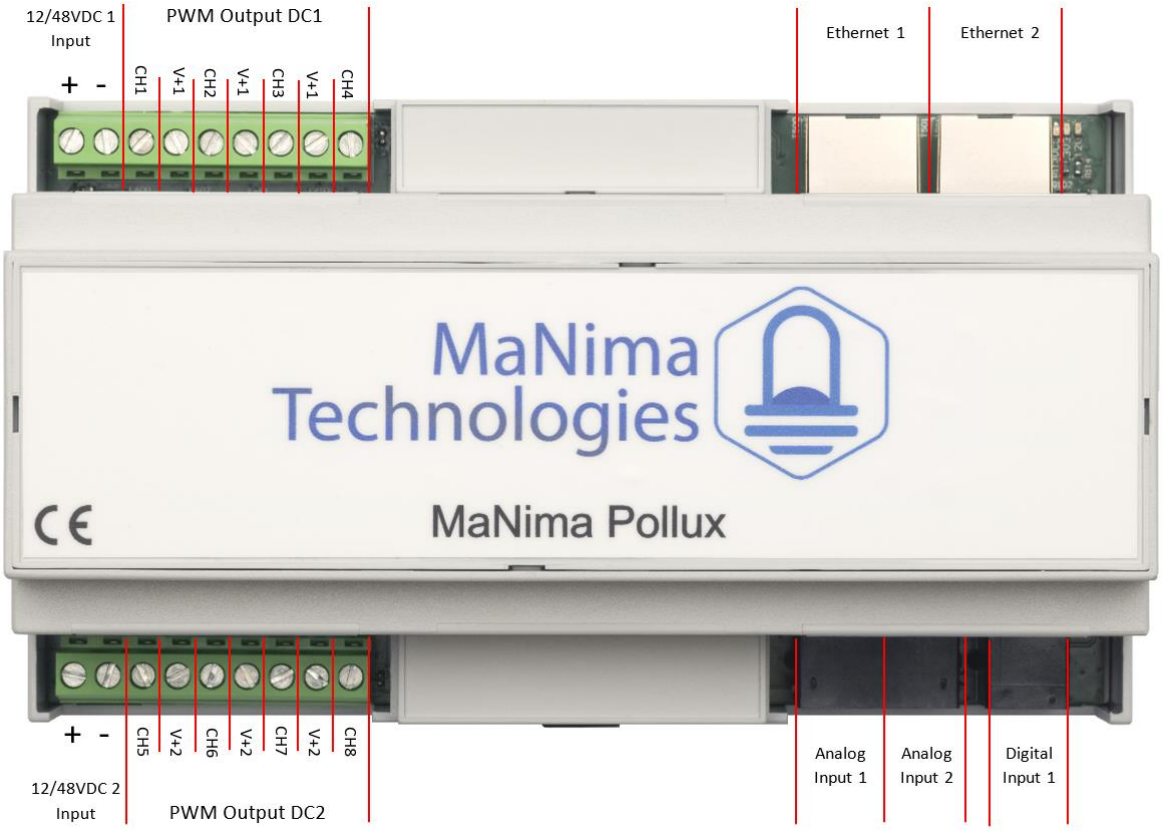
Connection Diagram

Descriptions of ports from top left to bottom right:



12/48V DC1: Power input for power source 1. Corresponds with 'DC1 PWM Outputs'.

12/48V DC2: Power input for power source 2. Corresponds with 'DC2 PWM Outputs'.

DC1 PWM Outputs: 4 x PWM Outputs and 3 x V+. Corresponds with '12/48V DC1' Power input.

DC2 PWM Outputs: 4 x PWM Outputs and 3 x V+. Corresponds with '12/48V DC2' Power input.

Analog input 1: Input for analog sensors. See next page for the pinout.

Analog input 2: Input for analog sensors. See next page for the pinout.

Digital input 1: In-and outputs for the digital sensors. See next page for the pinout.

Ethernet 1 and 2: RJ45 connector Ethernet switch for connecting the Pollux to the network.

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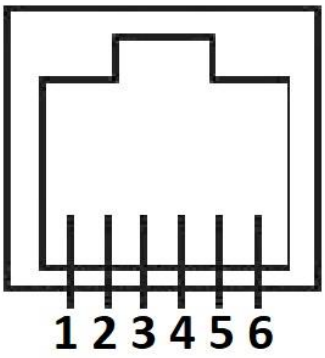
Pinout schematics

Connector Type: 6PC6

Analog 1			
Pin	Function	Max Current	Max Voltage
1	NTC1_1	50mA	3,3V
2	NTC2_1	50mA	3,3V
3	NTC3_1	50mA	3,3V
4	NTC4_1	50mA	3,3V
5	GND	50mA	0,1V
6	GND	50mA	0,1V



Analog 2			
Pin	Function	Max Current	Max Voltage
1	NTC5_1	50mA	3,3V
2	NTC6_1	50mA	3,3V
3	LDR_1	50mA	3,3V
4	LDR_2	50mA	3,3V
5	GND	50mA	0,1V
6	GND	50mA	0,1V

Digital 1			
Pin	Function	Max Current	Max Voltage
1	Digital Out 1_1	50mA	300V
2	Digital Out 1_2	50mA	300V
3	Digital Out 2_1	50mA	300V
4	Digital Out 2_2	50mA	300V
5	Digital In 1	5mA	48V
6	Digital In 2	5mA	48V

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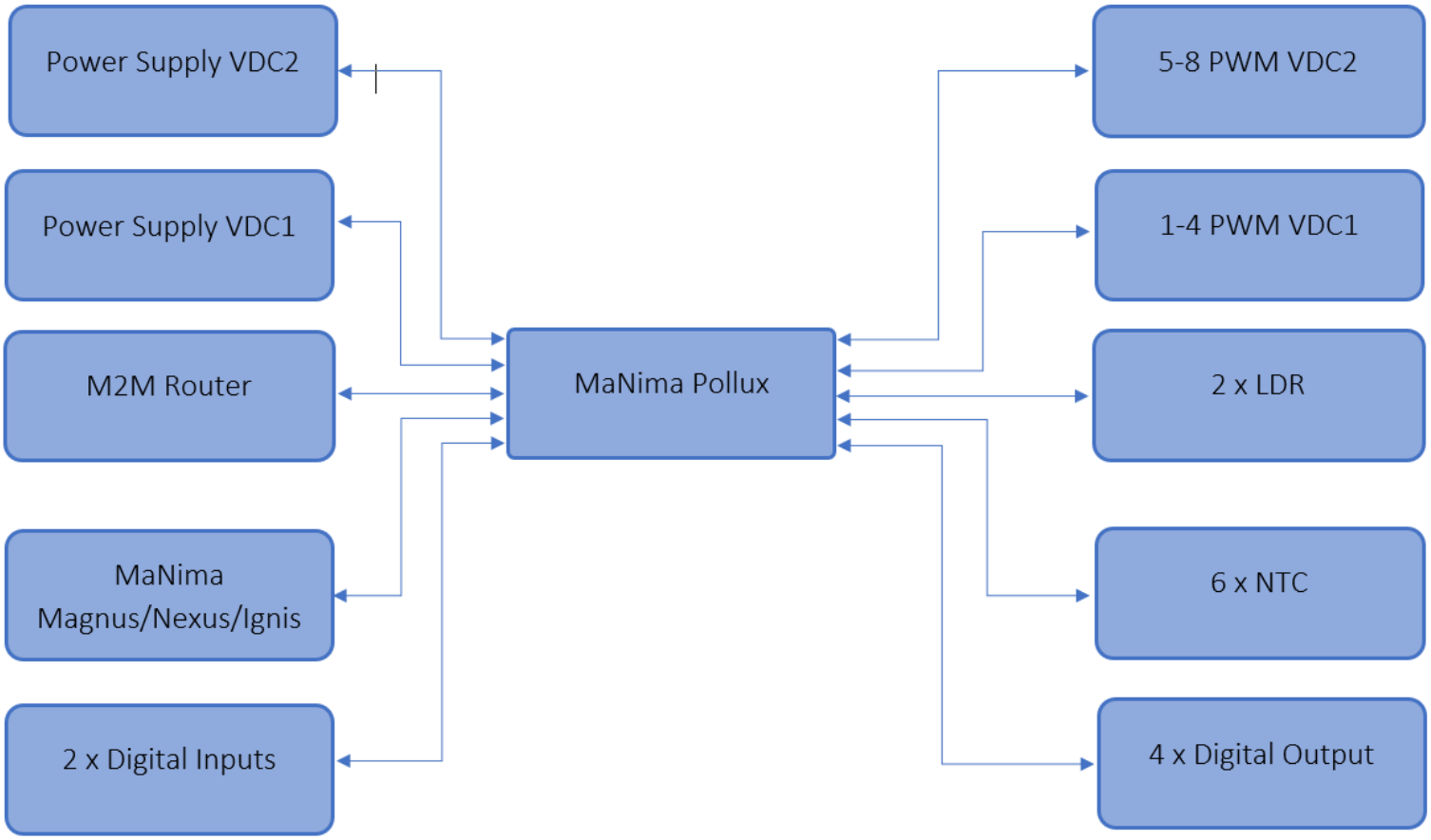
Overview

MaNima Pollux

Overview



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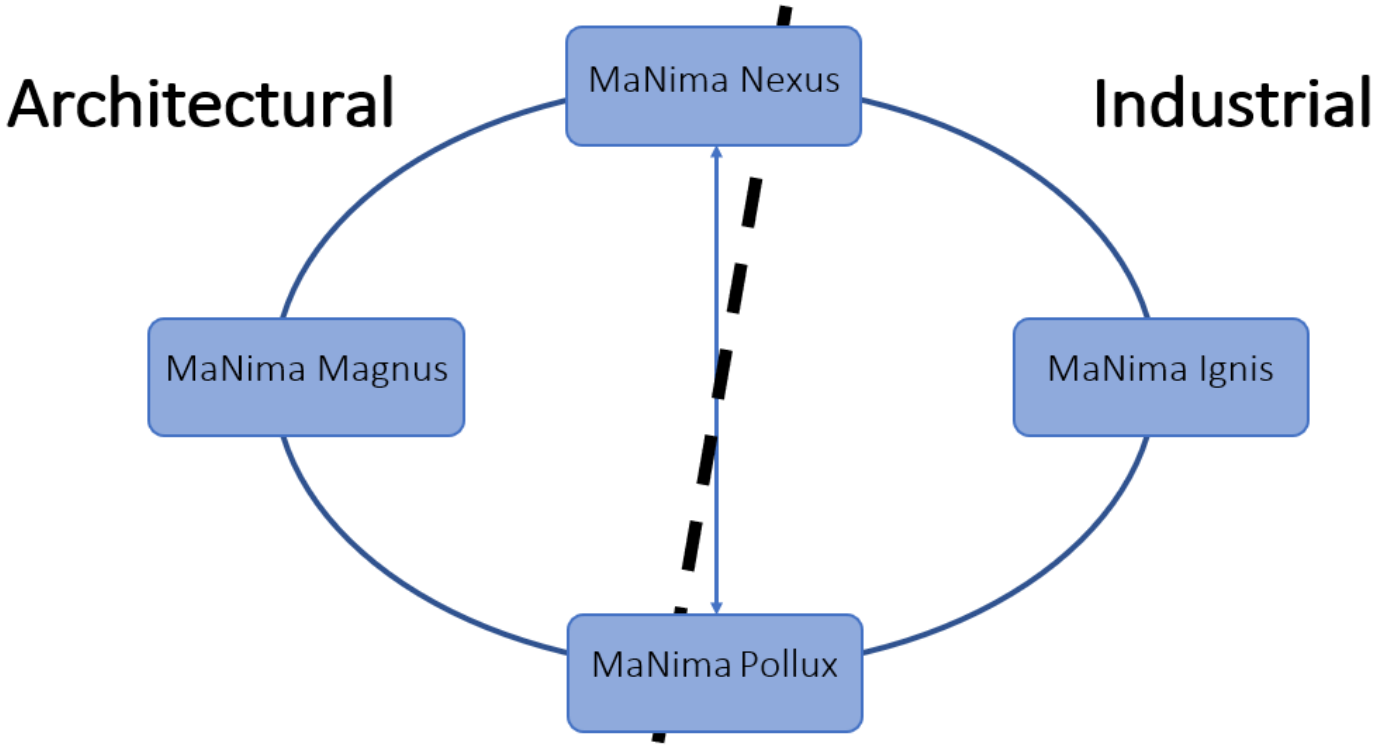
MaNima Network Overview



MaNima Magnus Interface: The MaNima Magnus Architectural LED Interface is a professional LED controller with an industrial design made for operating digital LED installations. The Interface is also able to control multiple protocols at once.

MaNima Ignis Interface: The MaNima Ignis Industrial Interface is a LED Interface designed for the Industrial market. The MaNima Ignis is a stable and reliable platform that is used in the process industry for operating LEDs. The MaNima Ignis can communicate with existing systems.

MaNima Nexus Module: The MaNima Nexus is a module used for connecting advanced and complex systems to a network of MaNima products.

MaNima Pollux Module: The MaNima Pollux is an Industrial PWM and LED Monitoring Module made for the professional market. The MaNima Pollux must be combined with a MaNima Ignis/Magnus in order to function. The MaNima Pollux is a versatile device which can fulfil many different tasks. The MaNima Pollux had been designed to be reliable, stable and fail-safe.

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