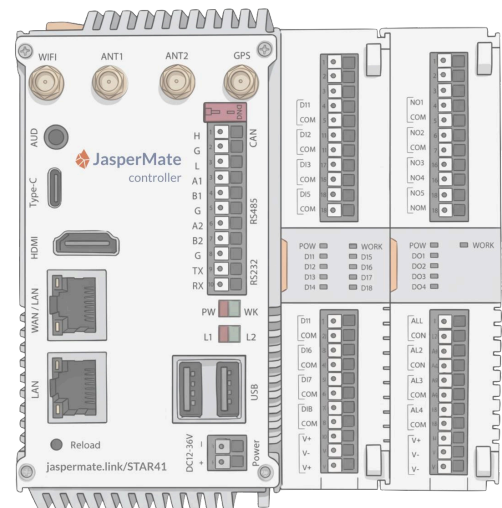


JasperMate Datasheet

model: V1-EX2

JasperMate is a DIN-rail automation controller for industrial and commercial machines, programmed in plain words from any web browser. The JasperX app drafts the logic from your description and JasperMate runs it on site. One outbound and encrypted link gives you remote monitoring and support.

It runs on 12-36 V DC and carries 8 digital inputs, 4 relay outputs and 4 isolated 4-20 mA analogue inputs on board, with up to 10 expansion cards for larger jobs. There is no programming cable and no software to install: connect power and a network, open the unit's jaspermate.link address, and the controller is found automatically. Once the machine is commissioned, monitor it from the same web app you programmed it in.



ELECTRICAL SPECIFICATIONS

DC Supply Voltage	12-36VDC (12 Watt)
Onboard I/O	Included
Digital Inputs	8x Digital Input (12-24VDC)
Digital Outputs	4x Relay Output (24VDC 3A)
Analog Inputs	4x Analog 4-20mA (Isolated)
Expansion	Up to 10 I/O Cards via Side-Bus

PERFORMANCE SPECIFICATIONS

Main Programming Method	AI Agent via chat
Alternative Programming	JavaScript
User Interface	Web Browser
Operating System	Optimised Ubuntu 20.04 LTS
CPU Architecture	Quad-core ARM Cortex-A55
Memory and Storage	DDR4 4GB / eMMC 32GB

CONNECTIVITY & INTERFACE

Ethernet	2x RJ45 Ports (Independent MACs)
WAN	For Cloud/AI (10/100/1000 Mbps)
LAN	For Local Fieldbus (10/100 Mbps)
Wireless (WiFi)	Dual-Band WiFi (802.11b/g/n/ac/ax)
Cellular	2x Nano-SIM, LTE Cat4 support
GPS	High sensitivity -162dBm within 10 m
Serial Connectivity	2x RS485, 1x RS232, 1x CAN ¹

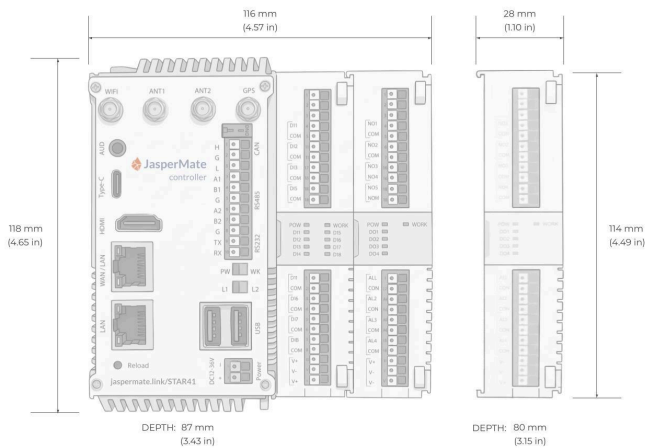
¹ Hardware ready, not supported in early firmware versions.

WIRING & INSTALLATION

Terminal Type	Spring-loaded Push-in
Recommended Wire	0.75mm ² (with bootlace ferrule)
Maximum Wire Size	Do not exceed 1.5mm² wire size

MECHANICAL SPECIFICATIONS

Dimensions	Including onboard I/O
Base Unit	118H x 116W x 87D (mm) 4.65H x 4.57W x 3.43D (in)
Additional Expansion Card	114H x 28W x 80D (mm) 4.49H x 1.10W x 3.15D (in)
Weight	500g / 1.1 lb
Mounting option	Standard 35mm DIN Rail

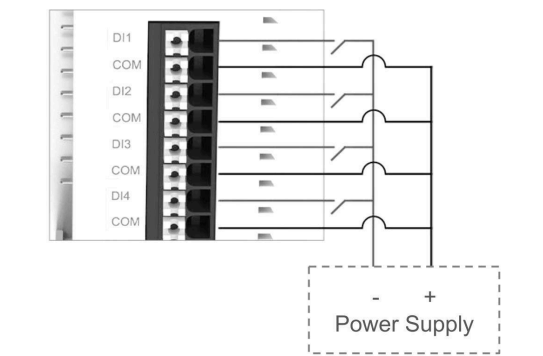


ENVIRONMENTAL SPECIFICATIONS

IP Rating	IP20 (Cabinet installation required)
Enclosure	Powder-Coated Aluminium
Operating Temperature	-20°C to +45°C
Humidity	5% to 95% (Non-condensing)

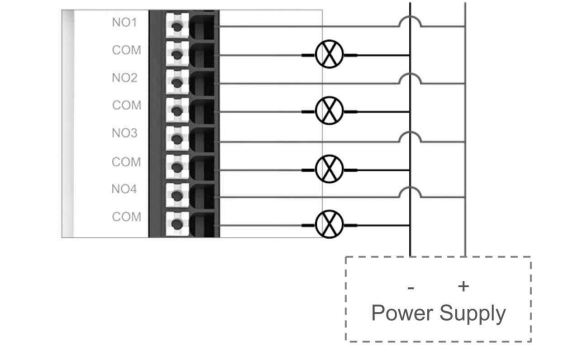
Standard Wiring & Expansions

DIGITAL INPUTS



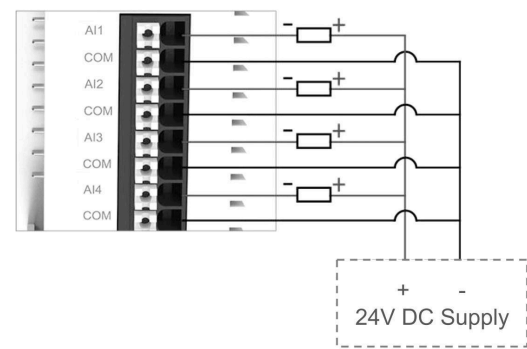
Compatible with standard switching sensors (e.g. proxies), switches, and buttons. Inputs rated for 12V to 24V DC.

RELAY OUTPUTS



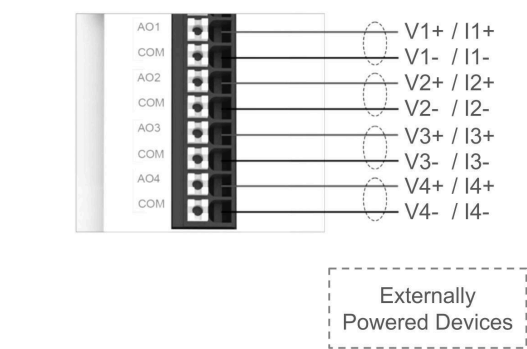
Dry contact relays rated for 3A. Perfect for switching contactor coils, pilot lights, or signaling to other systems.

ANALOG INPUTS (2-WIRE)



Standard 2-wire 4-20mA inputs for level sensors, pressure transducers, and temperature transmitters.

ANALOG OUTPUTS



Isolated 2-wire 0-10V or 4-20mA outputs for externally powered devices like actuators and VFDs.

EXPANSION CARDS

JasperMate supports up to 10 I/O cards in total.
Note: Digital Inputs and Outputs are not suitable for high-speed applications.

I/O Type	I/O Spec	IO8000	IO0440	IO4040	IO0080	IO0404
Digital Inputs	12-24VDC, no High Speed DIs	8	0	4	0	0
Analog Inputs	4..20mA	0	4	0	0	4
Digital Outputs	12-24VDC 3A relay	0	4	4	8	0
Analog Outputs	4..20mA / 0..10V (selectable)	0	0	0	0	4