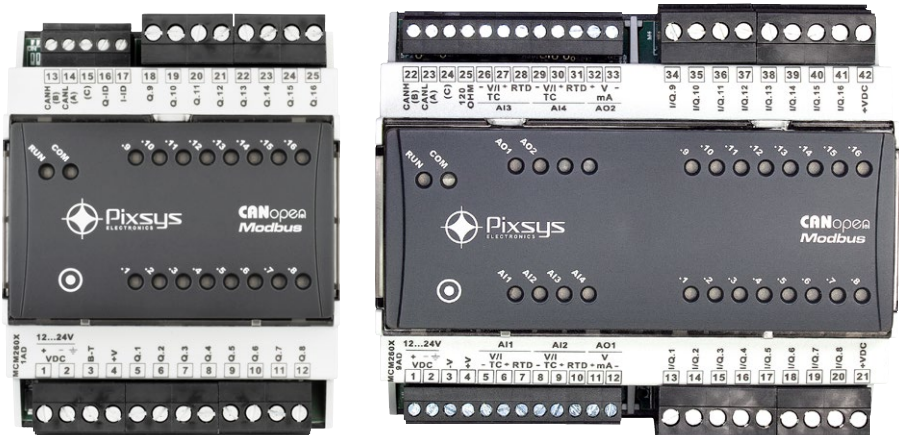


MCM260X

Modbus RTU - CANopen expansion module



2 Composition of acronym

The MCM260X series includes the following models:

MCM260X-	
MCM260X-1AD	Power supply 12..24 Vdc 16 Static Outputs 12..24Vdc
MCM260X-2AD	Power supply 12..24 Vdc 16 Digital inputs PNP 12..24Vdc 2 Analog inputs 0..10V 3 Encoders/Counters
MCM260X-3AD	Power supply 12..24 Vdc 8 Digital inputs PNP 12..24Vdc 8 Static Outputs 12..24Vdc 3 Encoders/Counters
MCM260X-4AD	Power supply 12..24 Vdc/Vac 8 Digital inputs PNP 12..24Vdc 8 Relay outputs 2 Analog inputs 0..10V 3 Encoders/Counters
MCM260X-5AD	Power supply 12..24 Vdc/Vac 4 Universal analog inputs 2 Analog outputs 0..10V / 4..20mA
MCM260X-9AD	Power supply 12..24 Vdc 4 Universal analog inputs 2 Analog outputs 0..10V / 4..20mA 16 Static outputs 12..24Vdc / Digital inputs PNP 12..24Vdc 4 Encoders/Counters

3 Technical data

3.1 General characteristics

Displays	4 0.52 inch displays RUN, COM LEDs and I/O status LEDs
Operating conditions	Temperature: 0-50 °C -Humidity 35..95 Rh% Max. altitude: 2000m
Protection	IP30 container
Materials	Container: Self-extinguishing polycarbonate Front: Self-extinguishing polyamide
Weight	Approximately 250 g

3.2 Hardware characteristics

3.2.a MCM260X-1AD

Power supply	12..24 Vdc \pm 15%	Consumption 100VA max
Digital outputs	16 static outputs 12-24Vdc	Max 700mA per output Max 3A in total for all the outputs
Communication port	2 modes to select: - RS485 with Modbus RTU protocol - CAN with CANopen protocol	Galvanically isolated Up to 115200 baud Up to 1Mbit

3.2.b MCM260X-2AD

Power supply	12..24 Vdc \pm 15%	Consumption 10VA max
Digital inputs	16 inputs PNP 12-24Vdc	$V_{IL} = 4.3V$ $V_{IH} = 8.0V$
Encoder/Counter inputs	3 encoders/counters superimposed on the PNP digital inputs	32 bit resolution Maximum frequency 80KHz
Analog inputs	2 inputs 0..10V superimposed on the digital inputs	45000 points resolution
Communication port	2 modes to select: - RS485 with Modbus RTU protocol - CAN with CANopen protocol	Galvanically isolated Up to 115200 baud Up to 1Mbit

3.2.c MCM260X-3AD

Power supply	12..24 Vdc \pm 15%	Consumption 50VA max
Digital inputs	8 inputs PNP 12-24Vdc	$V_{IL} = 4.3V$ $V_{IH} = 8.0V$
Encoder/Counter inputs	3 encoders/counters superimposed on the PNP digital inputs	32 bit resolution Maximum frequency 80KHz
Digital outputs	8 static outputs 12-24Vdc	Max 700mA per output Max 3A in total for all the outputs
Communication port	2 modes to select: - RS485 with Modbus RTU protocol - CAN with CANopen protocol	Galvanically isolated Up to 115200 baud Up to 1Mbit

3.2.d MCM260X-4AD

Power supply	12..24 Vdc/Vac \pm 15%	Consumption 20VA max
Digital inputs	8 inputs PNP 12-24Vdc	$V_{IL} = 4.3V$ $V_{IH} = 8.0V$
Encoder/Counter inputs	3 encoders/counters superimposed on the PNP digital inputs	32 bit resolution Maximum frequency 80KHz
Analog inputs	2 inputs 0..10V superimposed on the digital inputs	45000 points resolution
Relay outputs	8 relay outputs with single in common	Contact data: 5A at 250Vac, 30Vdc resistive load 2A at 250Vac, 30Vdc inductive load Max exchange power 1250 VA, 150W resistive load 500 VA, 60W inductive load Max 10A in total
Communication port	2 modes to select: - RS485 with Modbus RTU protocol - CAN with CANopen protocol	Galvanically isolated Up to 115200 baud Up to 1Mbit


3.2.e MCM260X-5AD

Power supply	12..24 Vdc/Vac \pm 15%	Consumption 20VA max
Analog inputs	4 inputs that can be configured via software Thermocouples: type K, S, R, J, T, E, N, B; automatic compensation of cold junction at 0..50°C. Resistance thermometers: PT100, PT500, PT1000, Ni100, PTC1K, NTC10K (β 3435K) V/I input: 0-10V, 0-20 or 4-20mA, 0-60mV, 0-1V, 0-5V. Potentiometer: 1..150K Ω	Galvanically insulated from power supply and communication port 16 bit resolution Tolerance (25 °C) +/-0.2% \pm 1 digit (on F.s.)
Analog outputs	2 outputs that can be configured via software: 0-10V or 4-20mA	16 bit resolution
Sensor power supply output	Output to power supply 0-10V or 4-20mA normalized sensors to be connected to analog inputs	Galvanically insulated from power supply and communication port 24 Vdc, 100mA max
Communication port	2 modes to select: - RS485 with Modbus RTU protocol - CAN with CANopen protocol	Galvanically isolated Up to 115200 baud Up to 1Mbit

3.2.f MCM260X-9AD

Power supply	12..24 Vdc \pm 15%	Consumption 100VA max
Digital inputs	16 inputs PNP 12-24Vdc (Superimposed on the digital outputs)	$V_{IL} = 4.3V$ $V_{IH} = 8.0V$
Encoder/Counter inputs	4 encoders/counters superimposed on the PNP digital inputs	32 bit resolution Maximum frequency 80KHz
Analog inputs	4 inputs that can be configured via software Thermocouples: type K, S, R, J, T, E, N, B; automatic compensation of cold junction at 0..50°C. Resistance thermometers: PT100, PT500, PT1000, Ni100, PTC1K, NTC10K (β 3435K) V/I input: 0-10V, 0-20 or 4-20mA, 0-60mV, 0-1V, 0-5V. Potentiometer: 1..150K Ω	Galvanically insulated from power supply and communication port 16 bit resolution Tolerance (25 °C) +/-0.2% \pm 1 digit (on F.s.)
Digital outputs	16 static outputs 12-24Vdc (superimposed on the digital inputs)	Max 700mA per output Max 2A in total for each group of 8 outputs (Q.1-Q.8 and Q.9-Q.16)
Analog outputs	2 outputs that can be configured via software: 0-10V or 4-20mA	16 bit resolution
Sensor power supply output	Output to power supply 0-10V or 4-20mA normalized sensors to be connected to analog inputs	Galvanically insulated from power supply and communication port 24 Vdc, 100mA max
Communication port	2 modes to select: - RS485 with Modbus RTU protocol - CAN with CANopen protocol	Galvanically isolated Up to 115200 baud Up to 1Mbit

3.3 Software features

Manual configuration via terminal	It is possible to manually configure the parameters related to the communication of each device using the terminal with display and buttons present on the inside of the top cover of the instrument, accessible through the opening towards the bottom of the cover itself
Configuration via app MyPixsys via NFC	<p>It is possible to configure the parameters relating to the communication of each device using the MyPixsys app and transferring the data via NFC. Simply move your smartphone close to the antenna present on the cover of the instrument, in the point marked by the symbol .</p> <p>Configuration via the MyPixsys app is possible with the instrument both on and off.</p> <p>When activated by a reader/interrogator supporting NFC-V protocol, the controller is to be considered a VICC (Vicinity Inductively Coupled Card) according to ISO/IEC 15693 and it operates at a frequency of 13.56 MHz.</p> <p>The device does not intentionally emit radio waves.</p>
Termination resistance	You can automatically activate a termination resistance of the communication line by setting a specific parameter
Communication protocol	The device can operate in two communication modes. The mode is selected in the configuration phase, via terminal or using the MyPixsys app. Only the selected mode will be active

4 Dimension and installation

