MAX·WARE INDUSTRY

MX1-MB-8AOV

MODBUS DATA ACQUISITION MODULE

V5- V5+ V4- V4+ V3- V3+ V2- V2+ V1- V1+ V0- V0+

MAX·WARE INDUSTRY

RESET

PWR SYS RXD TXD

MX1-MB-8AOV

A0+ A0- V6+ V6- A1+ A1- V7+ V7- A+ B- 0V 24+

WWW.MAX-WARE.IT
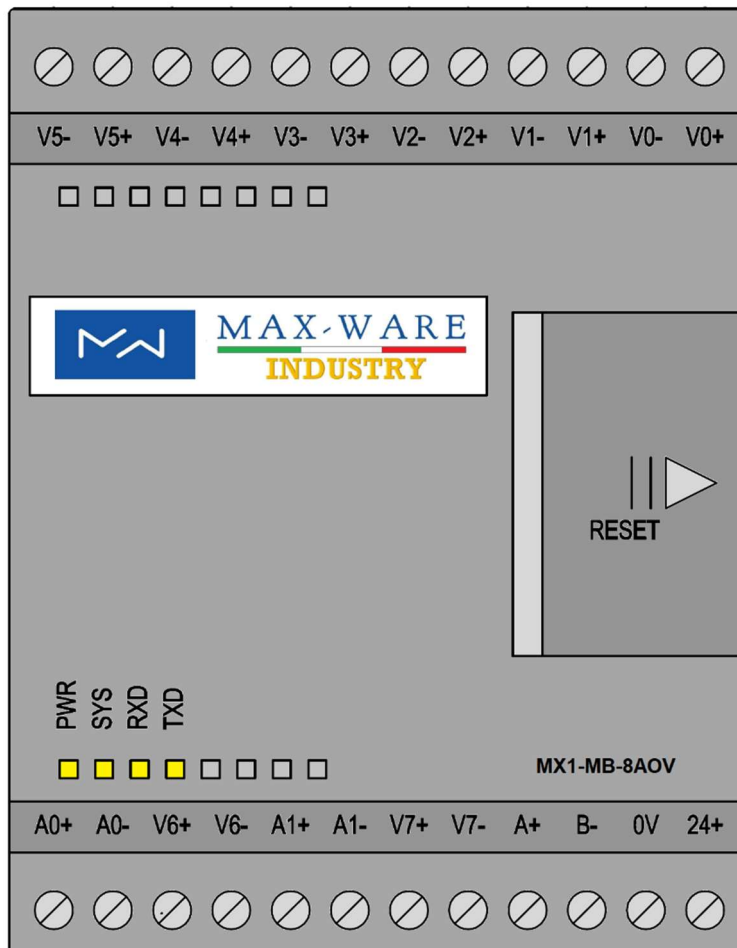
TABLE OF CONTENT

Sommario

WWW.MAX-WARE.IT

2 PRODUCT SPECIFICATION
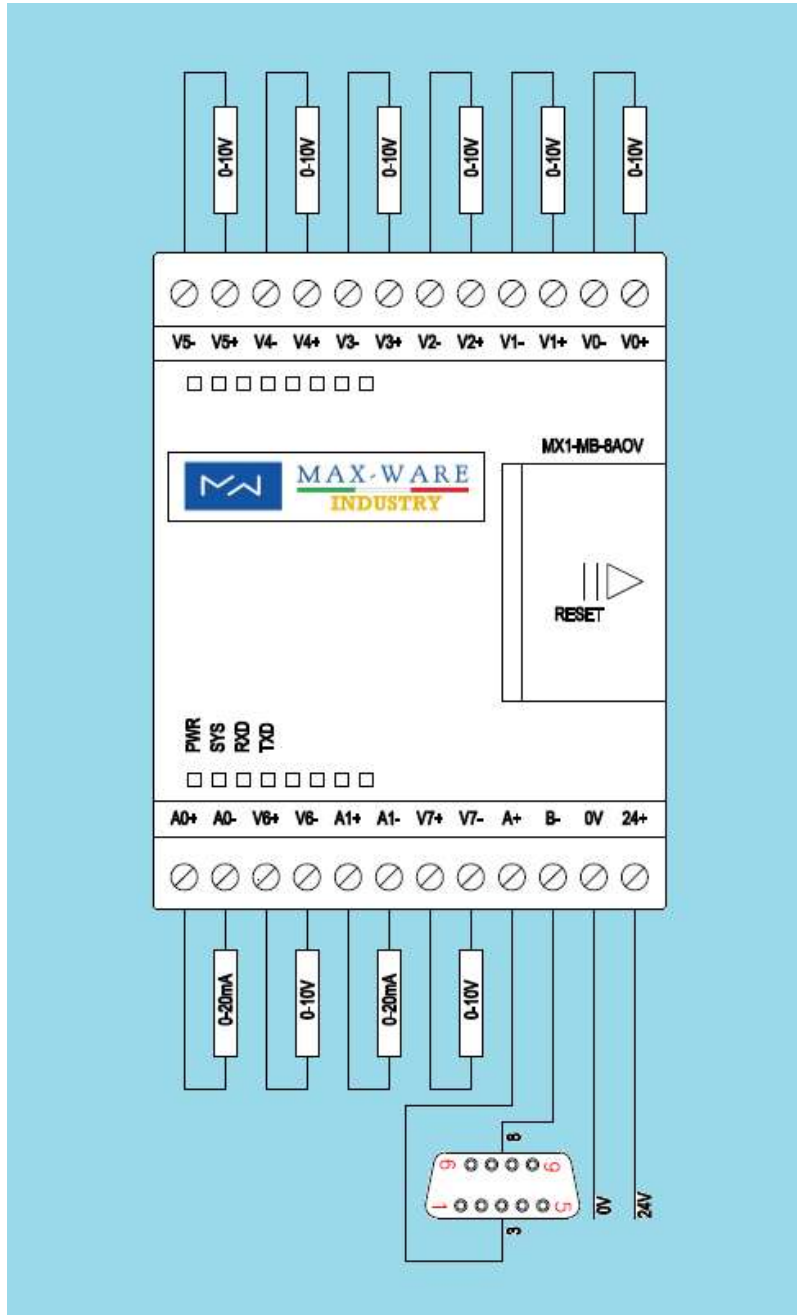
DIGITAL INPUT	NO
DIGITAL OUTPUT	NO
ANALOGIC INPUT	NO
ANALOGIC OUTPUT	8 ANALOG OUTPUT 6 Type: 0-10v Conversion accuracy: 12bit (0-4096 INT) 2 Type: 0-10v or 4..20ma Conversion accuracy: 12bit (0-4096 INT)
COM PORT 1	Type: RS485 2 wire A-B Baudrate: 1200-115200 (cfg) Comunication format: Default 8-bit data, 1-bit stop, no check (cfg) Address range: 1-254 Trasmission distance: 1200m Comunication mode: MODBUS RTU slave
COM PORT 2	NO
ETHERNET PORT	NO
POWER	Operating voltage: DC 24V; with anti-reverse protection Power consuption: 2–4 W
TEMPERATURE	-20℃ +70℃
DIMENSIONS	70MM (length) * 80MM (width) * 60MM (height
INSTALLATION MODE	Guide rail DIN

3 WIRING

WWW.MAX-WARE.IT

PIN ASSIGNEMENT					
V0+	Ch1 voltage output +	V0-	Ch1 voltage output -	24+	24VDC
V1+	Ch2 voltage output +	V1-	Ch2 voltage output -	0V	0 VDC
V2+	Ch3 voltage output +	V2-	Ch3 voltage output -	B	B MODBUS
V3+	Ch4 voltage output +	V3-	Ch4 voltage output -	A	A MODBUS
V4+	Ch5 voltage output +	V4-	Ch5 voltage output -		
V5+	Ch6 voltage output +	V5-	Ch6 voltage output -		
V6+	Ch7 voltage output +	V6-	Ch7 voltage output -		
V7+	Ch8 voltage output +	V7-	Ch8 voltage output -		
A0+	Ch7 current output +	A0-	Ch7 current output -		
A1+	Ch8 current output +	A1-	Ch8 current output -		

4 COMMUNICATION FUNCTION

SERIAL PORT FUNCTION

PORT	SUPPORT FUNCTION	MAX CONNECTION	DESCRIPTION
COM 1	MODBUS RTU SLAVE	1	MODBUS RTU SLAVE

5 RESTORE TO FACTORY DEFAULT

Re-power, effective within 1 minute, long press reset button SYS lamp flashing 6 times after release, Sys lamp flash flash flash slow flash after re-power, reset successful.

Parameter Name	Parameter Default Value
Module Address	1
Baud rate	9600
Serial communication parameters	8 bits of data, 1 bit of stop bit, no parity
Serial port mode	MODBUS RTU SLAVE
Bus error mode	Output reset

6 MODBUS ADDRESS TABLE

NAME	PLC ADDRESS	MODBUS ADDRESS	FUNCTION
ANALOG OUTPUT CH 1	40001	0x00	0x03 , 0x06
ANALOG OUTPUT CH 2	40002	0x01	0x03 , 0x06
ANALOG OUTPUT CH 3	40003	0x02	0x03 , 0x06
ANALOG OUTPUT CH 4	40004	0x03	0x03 , 0x06
ANALOG OUTPUT CH 5	40005	0x04	0x03 , 0x06
ANALOG OUTPUT CH 6	40006	0x05	0x03 , 0x06
ANALOG OUTPUT CH 7	40007	0x06	0x03 , 0x06
ANALOG OUTPUT CH 8	40008	0x07	0x03 , 0x06
SYSTEM			
NAME	MODBUS ADDRESS	default	

7 CONFIGURATION

Use 485 interface and software for the configuration.

Software link: [DOWNLOAD](www.max-ware.it/DOWNLOAD/MX1-SOFT-CONF.zip) (www.max-ware.it/DOWNLOAD/MX1-SOFT-CONF.zip)

Interface type: 485-usb interface (MX1-MB-INTERFACE)

Default connection parameter:

Connection parameters	
COM number	COM1
Baud rate	9600
Parity bits	None
Data bits	8
Stop bits	1
Address	1

Communication parameters

Connection parameters
- COM number: COM1
- Baud rate: 9600
- Parity bits: None
- Data bits: 8
- Stop bits: 1
- Address: 1

[Search for port] [Disconnect] [Connect]

Module Parameter Configuration
- Baud rate: 9600
- Parity bits: None
- Address: 1
- Version:

[Readout paramete] [Restore factory] [Write paramete]

Resetting parameters
- ☑ Bus error reset   ☐ Bus error hold
- Determination of bus error time threshold: 200 10ms [Set]
- ☐ Display calibration keys

Analog quantity outputs
- AOW0 [Write]
- AOW1 [Write]
- AOW2 [Write]
- AOW3 [Write]
- AOW4 [Write]
- AOW5 [Write]
- AOW6 [Write]
- AOW7 [Write]

Starting Address: 0
Length of data: 1

[Write to multiple]

(1)Channels 1 to 8 are analog quantity output channels
(2)Channels 1 to 8 analog output range : 0~4095

OUTPUT TEST

CHANGE MODULE COMMUNICATION PARAMETER

RESET = BUS FAULT OUTPUT RESETTED

HOLD = BUS FAULT OUTPUT STAY LAST VALUE

After each change a reboot is necessary

WWW.MAX-WARE.IT