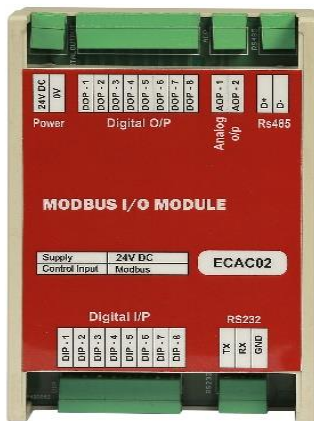




MODBUS IO Expander

8xDigital Inputs, 8xDigital Outputs, 2xAnalog Outputs

MODBUS IO Expander is a useful module for Automation Panel builders and Machine manufacturers. This card helps to increase the number of IO in the panel without increasing the PLC outputs. Hence manufacturer can benefit with cost savings. This module consists of 8x Digital Inputs, 8x Digital Outputs, 2x Analog Outputs. This module is designed with a high performance microcontroller, RS232 & RS485 for MODBUS RTU. Our module functions as a MODBUS RTU Slave, which receives input read and output write command over MODBUS and perform the function accordingly. Module configuration (Slave ID, Baud Rate, etc.,) can be done using RS232 and IO Read/Write can be done via RS232/RS485.



Features

- ✓ Standard 24V operation.
- ✓ 1 x RS232, 1 x RS485 with MODBUS RTU.
- ✓ Can be interfaced easily to PLC or HMI.
- ✓ 8x Digital Inputs - PNP type
- ✓ 8x Digital Outputs - NPN type with Protection diodes
- ✓ 2x Analog Outputs - 0...10VDC
- ✓ 45mm DIN Rail casing with CombiCon connectors

Mechanical Characteristics

Operating temperature	:	0...+65 (°C)
Size (l*b*h)	:	105*70*55 mm
Housing	:	DIN Rail ABS Plastic Enclosure
Weight	:	85 grams.



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Connector Info

Pin numbers mentioned are from left to right.

TOP SIDE CONNECTOR

PIN#	CONNECTION
SUPPLY CONNECTION	
24+	24V DC Supply
24-	Ground 0V
DIGITAL OUTPUTS	
DOP1	Digital Output1
DOP2	Digital Output2
DOP3	Digital Output3
DOP4	Digital Output4
DOP5	Digital Output5
DOP6	Digital Output6
DOP7	Digital Output7
DOP8	Digital Output8
ANALOG OUTPUTS	
AOP1	Analog Output1
AOP2	Analog Output2
RS485 INTERFACE	
D+	RS485 D+
D-	RS485 D-

BOTTOM SIDE CONNECTOR

PIN#	CONNECTION
DIGITAL INPUTS	
DIP1	Digital Input1
DIP2	Digital Input2
DIP3	Digital Input3
DIP4	Digital Input4
DIP5	Digital Input5
DIP6	Digital Input6
DIP7	Digital Input7
DIP7	Digital Input8
RS232 INTERFACE	
Tx	RS232 Tx
Rx	RS232 Rx
GND	Ground - 0V

Communication Parameters for RS-485 & RS-232:

Parameter	RS232	RS485	
		Default	Configurable
Protocol	MODBUS - RTU Slave (Hex)	MODBUS - RTU Slave (Hex)	No
Slave Number	1	1	Yes
Baud Rate	9600	9600	Yes
Data bits	8	8	No
Parity	None	None	No
Stop Bits	2	2	Yes
Retry Count	2	2	No
Time Out	1000ms	1000ms	No

NOTE: The Parameters for RS232 is always cannot be changed. To change Configurable Parameters for RS485 refer the Register Section below.