TECHNICAL SPECIFICATION



12 inputs 4 outputs Modbus I/O expander

AMB-12I-40



Features

- 12×30V DC digital inputs
- 4×NO relay outputs
- Baud rate 4800 to 128000
- Modbus addresses: 1 to 247
- RX/TX and activity indicators
- Powered 8-36V DC or AC
- DIN rail mounting
- Compact size

The AMB-12I-4O input/output expander with Modbus RTU interface. It has 12 isolated digital inputs with voltage range up to 30VDC and 4 relay output with 7A 230V range and NO contacts. The power supply range

is 8 to 36V and accept DC or AC voltage. The use of DC / DC technology for supplying relays enables a wide range of supply voltages.

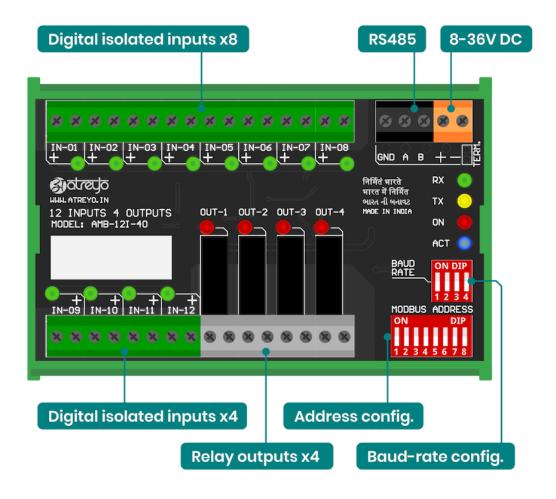
| Description | Parameter | |
|------------------|---|--|
| Serial interface | | |
| Interface Type | RS485 | |
| Data Rate | 4800, 9600, 14400, 19200, 28800, 38400, 57600, 115200, 128000 bps | |
| Signals | A, B and GND | |
| Data Length | 8 bits | |
| Parity | None | |
| Stop Bits | 1 | |
| Baudrate setting | 4 way DIP switch | |
| Address setting | 8 way DIP switch | |
| Connector | Screw connector, 28÷12AWG / 2.52mm | |
| Digital inputs | | |
| Input number | × 12 | |
| Input type | Opto-isolated 1.5kV | |

| Description | Parameter | |
|-----------------------|-----------------------------|--|
| Digital inputs | | |
| Configuration | Every input separate | |
| VIN _{max} | 30V DC | |
| Logic 1 Voltage range | 3V to VIN _{max} | |
| Connector | Screw connector, 28÷12AWG / | |
| | 2.52mm | |
| Digital outputs | | |
| Output number | × 4 | |
| Configuration | Potential free, relay NO | |
| Voltage and Load | 7A 230V AC and 7A 30V DC | |
| Connector type | Screw connector, 28÷12AWG / | |
| | 2.52mm | |
| Indicators | | |
| Inputs indicators | × 12 ø3mm LED green | |
| Outputs indicators | × 4 ø3mm LED yellow | |

| Description | Parameter | |
|-------------------|---------------------------------------|--|
| Indicators | | |
| RX/TX | × 2 ø3mm LED yellow/green | |
| Power | ×1ø3mm LED red | |
| Activity | ×1ø3mm LED blue | |
| Power supply | | |
| Supply voltage | 8-30V DC or 8-24V AC | |
| Power consumption | 1.5W (all relay ON) 0.5W (relays off) | |
| Connector type | Screw connector, 28÷12AWG / 2.52mm | |

| Description | Parameter | |
|-----------------------------|---------------------------|--|
| Physical characteristics | | |
| Installation | DIN-Rail mounting | |
| Housing | PVC | |
| Dimensions (L×W×H) | 120mm × 90mm × 50mm | |
| Weight | 110g | |
| Environmental specification | | |
| Operating temp. | -10 ~ 75°C (-14 ~ 167°F) | |
| Storage temp. | -40 ~ 85°C (-40 ~ 185°F) | |
| Ambient RH | 5% ~ 95% (non-condensing) | |

Expander



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