# **TECHNICAL SPECIFICATION**



## 4-20mA to Modbus RTU and USB

## **ADI-524**



## **Features**

- Isolated 4-20mA
- 4 channel of inputs
- Modbus RTU interface
- USB to serial inbuilt converter
- Baud rate and address config by DIP switch
- Power supply from external source or USB
- 4-20mA device connection indicators
- Wide power supply range up to 36V
- DIN rail mounting
- Aluminium enclosure

The ADI-524 is 4-20mA analog input interface converter to USB port make this device perfect to use with industrial Modbus RTU over RS485 or over USB. It has 4 opto-isolated analogue inputs and RS485/USB output. Extra isolated 24V power supply for 4-20mA sensor/devices and DIP switch for baud-rate and address setting.

computers and gateways with USB port.

It can be mounted on standard DIN rail or by using clamps.

| cuilg.                                                                    |  |  |
|---------------------------------------------------------------------------|--|--|
| Parameter                                                                 |  |  |
| 4-20mA inputs                                                             |  |  |
| 4                                                                         |  |  |
| 4-20mA isolated from rest of circuit. Not isolated from each other        |  |  |
| 2kVAC for 60s                                                             |  |  |
| 16Bit ΔΣ A/D                                                              |  |  |
| 24V/25mA                                                                  |  |  |
| USB                                                                       |  |  |
| 1                                                                         |  |  |
| USB 2.0                                                                   |  |  |
| USB type B                                                                |  |  |
| IEC 61000-4-2 level 4: - 15 kV (air discharge) - 8 kV (contact discharge) |  |  |
| Serial RS485 Modbus RTU                                                   |  |  |
| 1                                                                         |  |  |
| RS485                                                                     |  |  |
| 0/00 40000 00400 445000                                                   |  |  |
| 9600, 19200, 38400, 115200                                                |  |  |
|                                                                           |  |  |

| Description                 | Parameter                                                                                                                         |  |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--|
| Connector                   | Pluggable screw socket                                                                                                            |  |
| Protection                  | Opto-isolated 2.5kV RMS per UL<br>1577                                                                                            |  |
|                             | IEC 61000-4-2 level 4: - 15 kV (air discharge) - 8 kV (contact discharge) MIL STD 883C-Method 3015-6: class 3. (human body model) |  |
|                             | Fail-safe receiver for bus open, short and idle                                                                                   |  |
| Modbus address              | 1-15                                                                                                                              |  |
| System Functions Indicators |                                                                                                                                   |  |
| Indicators                  | 4x input presence, ACT – activity, power – dual colour                                                                            |  |
| System Support              |                                                                                                                                   |  |
| OS for USB                  | Linux, Windows, MAC OS                                                                                                            |  |
| Modbus RTU                  | All type PLC, gateways, computers etc with Modbus RTU interface                                                                   |  |
| Power Supply                |                                                                                                                                   |  |
| Power Voltage range         | 8-36V DC or 5V from USB                                                                                                           |  |

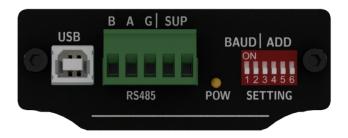
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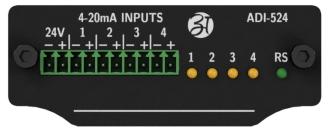
| Description              | Parameter                                             |  |
|--------------------------|-------------------------------------------------------|--|
| Power consumption        | 3W average                                            |  |
| Connector                | 5 pin (+, -) pluggable screw socket common with RS485 |  |
| Protection               | Reverse polarity, surge                               |  |
| Physical Characteristics |                                                       |  |
| Installation             | DIN-Rail, clamp                                       |  |
| Housing                  | Aluminium                                             |  |

| Description                 | Parameter                  |  |
|-----------------------------|----------------------------|--|
| Weight                      | 130g                       |  |
| Dimensions                  | 88mm x 44mm x 35mm         |  |
| Environmental Specification |                            |  |
| Operating Temp.             | -25 ~ 85°C (-13 ~ 158°F)   |  |
| Storage Temp.               | -40 ~ 85°C (-40 ~ 176°F)   |  |
| Ambient RH                  | 5% to 95% (non-condensing) |  |









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