

TECHNICAL SPECIFICATION

4 channel 4–20mA to Modbus RTU and USB

ADI-524



Features

- Isolated 4–20mA
- 24bit delta-sigma ADC
- 4 input channels
- Modbus RTU protocol
- USB to serial inbuilt converter
- One isolated 24V output for sensor supply
- 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

Four-channel optically isolated converter of analogue 4–20mA signals to Modbus RTU interface, equipped with 24-bit delta-sigma ADC converters. It also features a USB port and an additional 24V isolated power supply for 4–20mA devices. USB port make this device perfect

to use with industrial computers and gateways with USB port. It has DIP switch for baud-rate and Modbus address configuration.

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

Description	Specification
4–20mA inputs	
Input number	4
Type	4–20mA isolated from rest of circuit. Not isolated from each other
Isolation	2kVAC for 60s
ADC converter	24Bit $\Delta\Sigma$ ADC
Data reading time	Each channel 200ms
Isolated power out	24V 2W max, isolated form main and from inputs
Connector	Pluggable screw socket
USB	
USB port number	1
USB	USB 2.0
Connector	USB type B
Protection	IEC 61000–4–2 level 4: – 15 kV (air discharge)

Description	Specification
	– 8 kV (contact discharge)
Serial RS485	
Port number	1
Interface Type	RS485
Data Rate	9600, 19200, 38400, 115200
Signals	A and B and ground
Connector	Pluggable screw socket
Protection	IEC 61000–4–2 level 4: – 15 kV (air discharge) – 8 kV (contact discharge) 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

Description	Specification
System functions indicators	
	Serial – data send en receive
System support	
OS for USB	Linux, Windows, MAC OS
Modbus RTU	All type PLC, gateways, computers etc. with Modbus RTU masters functionality
Power supply	
Voltage range	8-36V DC or 5V from USB
Consumption	3W average
Connector	5 pin (+, -) pluggable screw socket common with RS485

Description	Specification
Protection	Surge
Physical characteristics	
Installation	DIN-Rail, clamp
Housing	Aluminium
Weight	130g
Dimensions	88mm x 54mm 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)

Interface



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