TECHNICAL SPECIFICATION

ATREYO®
SOLUTIONS THAT SIMPLIFY

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.

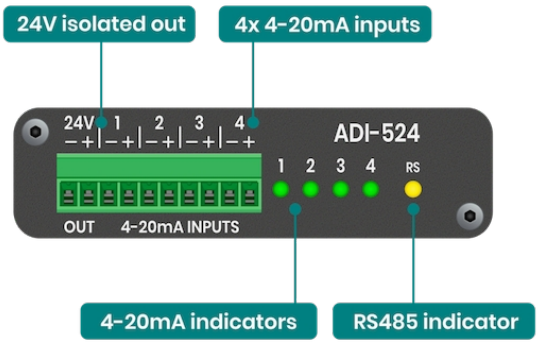
Description	Specification
4-20mA inputs	
Input number	4
Type	4-20mA isolated from rest of circuit. Not isolated from each other
Isolation	2kVAC for 60s
ADC converter	24Bit ΔΣ ADC
Data reading time	Each channel 200ms
Isolated power out	24V 2W max, isolated form main and from inputs
Connector	Pluggable screw socket
USB	
USB port number	1
USB	USB 2.0

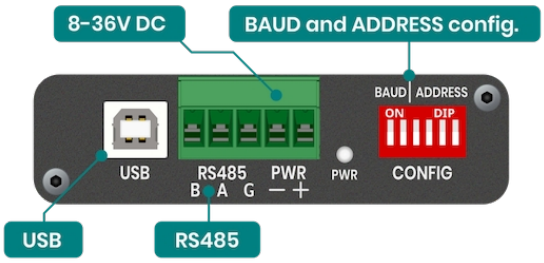
Description	Specification
Connector	USB type B
Protection	IEC 61000-4-2 level 4: – 15 kV (air discharge) – 8 kV (contact discharge)
Serial RS485	
Port number	1
Interface Type	RS485
Data Rate	9600, 19200, 38400, 115200
Signals	A and B and ground
Connector	Pluggable screw socket
Protection	IEC 61000-4-2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

Description	Specification
	short and idle
Modbus address	1-15
System functions indicators	
Indicators	4x input presence ACT – activity, power – dual colour 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

Description	Specification
Consumption	3W average
Connector	5 pin (+,-) pluggable screw socket common with RS485
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)

Connections





Packaging list

1 ADI-524 Interface
2 Female connectors without cable
3 DIN rail clamp with screws

Please note: The set does not include a power supply and USB cable.

For more details scan or click on QR code

Copyright

Copyright © 2026 Atreyo Research and Development Pvt. Ltd. This technical specification is protected under national and international copyright laws. No part of this user manual may be reproduced, distributed, translated, or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or storing in any information storage and retrieval system, without the prior written permission of Atreyo Research and Development Pvt. Ltd. Copy or use any part of this specifications is prohibited without the prior written permission from the Atreyo Research and Development Pvt. Ltd.

Trademarks

Atreyo and the Atreyo logo are registered trademarks of Atreyo Research and Development Pvt. Ltd.
All other trademarks and copyrights are the property of their respective owners.

Disclaimer

- The information contained in this Technical Specification is provided "as is" and is subject to change without notice. While every effort has been made to ensure the accuracy and completeness of the information contained herein, Atreyo Research and Development Pvt. Ltd. assumes no responsibility or liability for any errors or omissions.
- Images used in this specification may differ in appearance from the actual product.
- All dimensions mentioned in the drawings are not to scale and are subject to change and update as may be decided by the Atreyo Research and Development Pvt. Ltd.
- Atreyo Research and Development Pvt. Ltd. makes no warranties, either express or implied, regarding the contents of this document, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.
- Users of this Technical Specification should verify the applicability and suitability of the information and procedures to their particular use. Atreyo Research and Development Pvt. Ltd. shall not be liable for any damages, including but not limited to direct, indirect, special, incidental, or consequential damages, arising from or related to the use or inability to use this Technical Specification or the products described herein.
- By using this Technical Specification, you agree to the terms and conditions stated above. Atreyo Research and Development Pvt. Ltd. has right to make additions, deletions, alterations or amendments as and when it deems fit and proper, without any prior notice.

Atreyo Research & Development Pvt. Ltd.	**+91 9727741417** **info@atreyo.in**	2106, Z2, Thaltej, Ahmedabad, Gujarat, India