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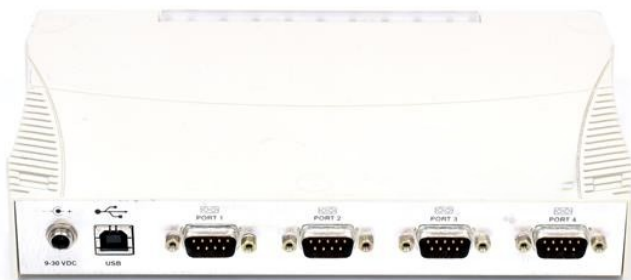
Data Sheet

August 13, 2026

NI

NI USB-485/4 4-Port Serial Instrument Control Interface for USB

The NI USB-485/4 is a 4-port RS-485 serial interface that connects multiple instruments and sensors to a computer via USB. Each port features independent DB9 connectors and onboard switchable termination resistors to ensure signal integrity in multipoint configurations. The device supports data rates up to 3 Mbps with user-configurable transmit and receive FIFO buffers, automatic data direction control, and wide common-mode voltage tolerance to accommodate ground potential differences across distributed systems. Aumictech offers NIST-traceable calibration and repair for the NI USB-485/4. All calibrations are performed to NIST-traceable standards and ship with a certificate. Turnaround is typically 1–3 business days after receipt. This NI USB-485/4 is listed at . Calibration is available separately from . Contact us for volume pricing or if you need multiple units. NIST-traceab



MODEL

NI USB-485/4

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

USB-485/4

LISTING

<https://aumictechlabs.com/products/usb-485-4-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The NI USB-485/4 is a 4-port RS-485 serial interface that connects multiple instruments and sensors to a computer via USB. Each port features independent DB9 connectors and onboard switchable termination resistors to ensure signal integrity in multipoint configurations. The device

supports data rates up to 3 Mbps with user-configurable transmit and receive FIFO buffers, automatic data direction control, and wide common-mode voltage tolerance to accommodate ground potential differences across distributed systems.

Technical Specifications

Serial Interface

Number of Ports: 4 Serial Standard: RS-485 Maximum Data Rate: 3 Mbps Automatic Data Direction Control: Supported Onboard Termination: Switchable 120 Ohm resistors per port FIFO Buffers: User-configurable transmit and receive USB Interface Connector: 1 × USB Type-A Standard: USB 2.0 High-Speed (480 Mbps) Power: Bus-powered

Electrical & Environmental

Operating Temperature: -20 °C to 70 °C Storage Temperature: -40 °C to 85 °C Humidity: 5% to 95% non-condensing RS-485 Noise Immunity: Meets RS-485 input voltage tolerance standards

Physical

Serial Connectors: 4 × DB9 male Enclosure: Metal or solid plastic construction

Key Features

Automatic RS-485 data direction control eliminates external signal management Multipoint communication capability for distributed sensor networks and daisy-chained instruments Wide common-mode voltage range compensates for ground potential differences in industrial environments Configurable FIFO buffers optimize data throughput for varied communication patterns Bus-powered operation requires no external power supply

Typical Applications

Industrial automation and process control Laboratory instrument integration and data acquisition Embedded systems requiring serial device connectivity Multi-device sensor networks over RS-485 networks

Compatibility & Integration

Operating Systems: Windows, macOS, Linux Software APIs: NI-Serial drivers, NI-VISA Compatible with standard serial communication libraries

Features & description

From manufacturer datasheet

Features

- Four RS-485/RS-422 ports on one USB interface
- 460.8 kbaud maximum; standard baud rates supported
- DB-9 male connectors; 128-byte FIFO per port
- Programmable bias resistors per port
- Four RS-485 transceiver control modes (two-wire and four-wire)
- Non-isolated USB-485 family (isolated models are separate catalog items)

USB4854 Characteristics / Specifications

PARAMETER	VALUE
Model	USB-485/4
Manufacturer	National Instruments
Instrument Type	USB Serial Interface
Series	USB-232/USB-485
Alias	USB-485/4; NI USB-485/4; USB-485 4 port
Port Count	4
Serial Protocols	RS-485 and RS-422
Isolation	none (USB-485/4 is the non-isolated four-port model)
Maximum Baud	460.8 kbaud
UART	16550 compatible
FIFO Size	128 bytes
Connector Type	DB-9 male
USB Connector	USB seriesBUSB Specification: USB 2.0
Cable Distance	up to 4000 ft (1.2 km) RS-485 class; up to 31 devices
Transceiver Modes	four hardware transceiver control modes for two-wire and four-wire
Biasing	software-selectable (programmatic) bias resistors per port
Handshake	RTS/CTS hardware handshake lines available
COM Compatibility	standard COM ports; NI-VISA
Case Material	hard plastic with metal baseplate
Dimensions	21.08 × 12.45 × 3.56 cm (8.3 × 4.9 × 1.4 in) four-port class
Weight	375 g (0.83 lb) four-port class datasheet
USB 485/4 Power	+12 VDC typical adapter; 225 mA typical, 500 mA maximum (9 V to 30 V class)
Ambient Temperature	0 to 70 C (IEC-60068-2-1 and IEC-60068-2-2)
Storage Temperature	-40 to 85 C (two and four port)
Relative Humidity	10 to 90% noncondensing (IEC-60068-2-56)

PARAMETER	VALUE
Altitude	2000 m maximum
Pollution Degree	2
Plug And Play	switchless configuration
Related One Port	USB-485 (1 port, 460.8 kbaud, DB-9 male, 128 byte FIFO, non-isolated)
Related Two Port	USB-485/2 (same electrical class as USB-485/4)
Related RS2	USB-232/4 is 230.4 kbaud RS-232, not this model Notes Specs from NI Serial Hardware Specifications and Features Guide and USB-232/USB-485 datasheet. USB-485/4 is not isolated; do not confuse with isolated PCI/PXI-843x RS-485 boards. Confirm adapter voltage and NI-Serial driver version on the installation.
Humidity	10 to 90% noncondensing (IEC-60068-2-56)

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	40 to 85 C (two and four port)
Humidity	10 to 90% noncondensing (IEC-60068-2-56)
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Related One Port	USB-485 (1 port, 460.8 kbaud, DB-9 male, 128 byte FIFO, non-isolated)
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Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Technical Specifications	
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Manufacturer	National Instruments
Instrument Type	USB Serial Interface
Series	USB-232/USB-485
Alias	USB-485/4; NI USB-485/4; USB-485 4 port
Port Count	4
Serial Protocols	RS-485 and RS-422
Isolation	none (USB-485/4 is the non-isolated four-port model)
Maximum Baud	460.8 kbaud
UART	16550 compatible
FIFO Size	128 bytes
Connector Type	DB-9 male
USB Connector	USB series B
USB Specification	USB 2.0
Cable Distance	up to 4000 ft (1.2 km) RS-485 class; up to 31 devices
Transceiver Modes	four hardware transceiver control modes for two-wire and four-wire
Biasing	software-selectable (programmatic) bias resistors per port
Handshake	RTS/CTS hardware handshake lines available
COM Compatibility	standard COM ports; NI-VISA
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Related RS232	USB-232/4 is 230.4 kbaud RS-232, not this model

Notes

Specs from NI Serial Hardware Specifications and Features Guide and USB-232/USB-485 datasheet. USB-485/4 is not isolated; do not confuse with isolated PCI/PXI-843x RS-485 boards. Confirm adapter voltage and NI-Serial driver version on the installation.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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<https://aumictechlabs.com>

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.