USBH232-MF2U

USB to Dual-Channel RS232 DB9 Adapter | **Built-in 2-Port USB 2.0 Hub** | **Plug & Play**

EN

Rev 1.0 | 2026.11.22



2× RS232
MALE+FEMALE

2-Port USB
INTEGRATED HUB

Dual Ctrl
NO BANDWIDTH SHARING

Plug & Play
BUS-POWERED

01 OVERVIEW

The **SerialSyncX USBH232-MF2U** is a professional-grade USB to dual-channel RS232 DB9 adapter with a built-in 2-port USB 2.0 hub, engineered for industrial automation and multi-device serial connectivity. It expands two fully independent RS232 serial ports plus two extra USB ports from a single upstream USB connection, simplifying wiring on your debug workstation and inside control cabinets.



SerialSyncX USBH232-MF2U
USB to Dual-Channel RS232 DB9 Adapter with Built-in USB Hub

Each RS232 channel uses a dedicated controller for true parallel operation with no shared bandwidth, while per-port isolation guarantees reliable 24/7 continuous operation. Dedicated TX, RX and power LEDs provide real-time data visualization for fast diagnostics during installation and field maintenance. One DB9 male and one DB9 female connector eliminate extra gender changers on site, and the onboard USB 2.0 hub accepts flash drives and dongles without a separate external hub. Housed in a rugged metal enclosure with strong EMI resistance, the adapter carries data and power over one USB Type-B port. Bus-powered and plug-and-play, it supports Windows, Linux and macOS for embedded development, industrial control, POS integration and serial hardware testing.

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01 KEY FEATURES

- All-in-one design: dual independent RS232 + 2-port USB 2.0 hub in single metal housing
- Separate controller per serial channel, fully parallel operation without bandwidth contention
- TX, RX and power status LEDs for each RS232 port
- DB9 male + DB9 female combo, no extra gender adapters required on site
- Integrated USB hub reduces separate peripherals and cable complexity
- Solid metal casing with excellent EMI suppression for industrial settings
- USB Type-B upstream for combined data transfer and bus power supply
- Plug-and-play, cross-platform support: Windows, Linux, macOS

02 SPECIFICATIONS

SERIAL INTERFACE

Serial Standard	EIA/TIA RS232
Serial Ports	2 × DB9, 1 Male + 1 Female
Channel Control	Independent controller per channel
Isolation	Per-port isolated design
Indicators	TX / RX / Power LED for each channel

USB & MECHANICAL

Upstream Interface	USB 2.0 Type-B
Integrated USB Hub	2 × USB 2.0 downstream ports
Power Supply	USB bus-powered
Enclosure	Metal housing, EMI resistant
Dimensions	94 × 70 × 26 mm (L × W × H)
Supported OS	Windows, Linux, macOS

INTERFACE DEFINITION

DB9 Male	RS232 serial channel 1
DB9 Female	RS232 serial channel 2
LED CH1 / CH2	TX, RX, Power status indicator
USB 2.0 ×2	Hub downstream ports
USB Type-B Upstream	Connect to host PC for data + power

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01 APPLICATIONS

- **Industrial automation:** multi-device serial connectivity in control cabinets and on production lines.
- **Embedded development:** parallel debugging and monitoring of two independent RS232 devices.
- **POS integration:** connect serial POS peripherals while the built-in hub handles USB devices.
- **Serial hardware testing:** two independent COM ports for simultaneous control and data monitoring.
- **Field maintenance:** DB9 male + female connectors and TX/RX/Power LEDs speed up on-site diagnostics.
- **Debug workstation:** one USB connection expands two serial ports plus two USB 2.0 downstream ports.

02 IMPORTANT NOTES

- **RS232 standard:** follows EIA/TIA-232 for point-to-point serial communication.
- **No direct RS485/RS422:** do not connect directly to RS485 or RS422 buses without a dedicated signal converter.
- **Hub power limit:** total current available for the downstream USB hub is limited by the host USB port output capacity.
- **High-power devices:** use an externally powered USB hub for devices with higher power requirements.

03 SERIAL PRODUCT FAMILY

flykantech.com offers four dedicated serial converter families for different industrial and embedded requirements. Contact our sales team to select the correct model matching your isolation, port count and functional needs.

- **SerialSyncX**
- **SerialEdgeX**
- **SerialGuardX**
- **SerialPulseX**