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Data Sheet

August 15, 2026

DDC

DDC BU-67103U USB Avionics Device with MIL-STD-1553 and ARINC 429 Interfaces

The DDC BU-67103U is a USB-based avionics interface device that supports both MIL-STD-1553 and ARINC 429 protocols. This device allows computers to communicate with and test avionics equipment using common communication standards used in aerospace applications. It is ideal for simulation, testing, and data analysis of avionics systems.



MODEL

DDC BU-67103U

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

BU-67103U

LISTING

<https://aumictechlabs.com/products/bu-67103u-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The DDC BU-67103U is a USB-based avionics interface device that enables direct computer communication with aerospace equipment via MIL-STD-1553 and ARINC 429 protocols. Engineered for avionics simulation, system testing, and data analysis, this unit supports configurable bus roles, dual-redundant operation, and comprehensive error injection/detection capabilities. Bus-powered operation via USB 2.0 High-Speed connection eliminates external power requirements while maintaining full functional scope across MIL-STD-1553 and ARINC 429 channels. Technical Specifications MIL-STD-1553B Interface Protocol: MIL-STD-1553B (Notice 2) Data Rate: 1 Mbps Bus Configurations: Bus Controller (BC), Remote Terminal (RT), or Bus Monitor (BM) Channel Operation: Single or dual-redundant configuration Remote Terminal Addressing: All

31 addresses supported Error Detection: Cyclic Redundancy Check (CRC) Message Types: Data transfers, status words, command/status words; error injection and detection for fault analysis ARINC 429 Interface Protocol: ARINC 429, Dual Redundant (Mark 33 DIT) Data Rates: High Speed 100 ± 10 kbps; Low Speed 12.5 ± 1 kbps or 14.5 ± 1 kbps (selectable) Word Format: 32-bit standard structure (Sign/Status, Label, Data, Parity) Parity: Odd parity generation and checking Label Support: Transmit and receive all labels Channel Configuration: Independently configurable transmit and receive channels USB & Power Interface: USB 2.0 High-Speed (Type B connector) Power: Bus-powered (typically <5 W) Environmental Operating Temperature: -40°C to $+71^{\circ}\text{C}$ Storage Temperature: -55°C to $+105^{\circ}\text{C}$ Humidity: 95% RH, non-condensing Shock & Vibration: MIL-STD-810G compliance Key Features Dual-protocol support eliminates need for separate interface modules Configurable MIL-STD-1553 bus roles streamline diverse test scenarios Error injection capabilities enable fault tolerance validation Independently configured ARINC 429 channels maximize channel utilization Bus-powered design simplifies field deployment and portable test setups Typical Applications Avionics component validation and certification Real-time system simulation and integration testing Data bus monitoring and fault diagnostics Retrofit and maintenance protocol verification Compatibility & Integration The BU-67103U interfaces with standard host computers through USB 2.0. Dual-redundant channel support across both protocols enables safety-critical avionics testing without additional hardware multiplexing.

BU67103U Characteristics / Specifications

PARAMETER	VALUE
Model	BU-67103U
Instrument Type	USB avionics interface
Family	BU-67X02U / BU-67X03U / BU-67211U
Host Interface	USB 2.0
Mil Std 1553 Channels	1 or 2 dual-redundant
One Five Five Three Modes	BC or Multi-RT 0 to 31 with concurrent Bus Monitor
Arinc 429 Receive	4 channels
Arinc 429 Transmit	2 channels
Arinc Speeds	low, high, and ARINC 575 with automatic slew
Discrete Io	8 user-programmable digital discretes
Irig Input	IRIG-B time code input
Pps Output	1 pulse-per-second output
Power	USB bus or included external supply
Lab Temperature	0 C to plus 55 C on BU-67103U200L-JL0
Config Example	BU-67103U200L-JL0 two SF 1553, 4 Rx / 2 Tx 429, 8 DIO
Sdk 15	BU-69092S AceXtremeCSDK
Sdk 4	DD-42992S ARINC 429 C SDK
Graphical Software	BusTrACEr, ARINC 429 DBA, ARINC 615 loader, LabVIEW, dataSIMS
Rugged Sibling	BU-67102UX same I/O in rugged package
Populations	1553 only, 429 only, or 1553/429 multi-IO
Manufacturer	Data Device Corporation
Package	non-rugged lab enclosure on 67103U
Related Pcie	BU-67106K four-channel 1553 PCI Express card
Application Class	lab test and simulation

BU67103U Specifications

PARAMETER	VALUE
Applications	Lab 1553/429 simulation and monitoring, portable USB avionics I/O, and concurrent BC/Multi-RT/monitor test.
Key Features	USB 2.0 lab package (BU-67103U) versus rugged BU-67102U
Four ARINC 429 Rx and two Tx	IRIG-B in and 1 PPS out
Technical Specifications	Model: BU-67103U

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	
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Notes

From DDC BU-67X02U/3U USB Avionics Device literature and BU-67103U200L-JL0 configuration listing. Confirm 1553 channel count and 429 population on the installed SKU.

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