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Data Sheet

August 15, 2026

DDC

DDC BU-67X02U USB Avionics Device with MIL-STD-1553 and ARINC 429 Interfaces

The DDC BU-67X02U is a USB-based avionics interface device that provides MIL-STD-1553 and ARINC 429 capabilities. It allows computers to communicate with and test avionics equipment using these standard communication protocols via a standard USB connection.



MODEL

DDC BU-67X02U

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

BU-67X02U

LISTING

<https://aumictechlabs.com/products/bu-67x02u-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The DDC BU-67X02U is a USB avionics interface device that enables real-time testing and integration of MIL-STD-1553 and ARINC 429 avionics systems. Connected via USB 2.0 to a host computer, this compact portable unit supports dual-redundant 1553 bus control, remote terminal emulation, and four ARINC 429 receive channels plus two transmit channels. It delivers the processing power and protocol fidelity required for flight line diagnostics, system development, troubleshooting, and software validation across defense and commercial aviation platforms. Technical Specifications MIL-STD-1553 Interface Up to (2) dual-redundant channels with independent Bus Controller and Multi-Remote Terminal (0-31) operation Concurrent Bus Monitor (MT) on each channel Advanced error sampling at 50 ns resolution 1 MB RAM with parity per channel Programmable direct or transformer coupling ACE TREME core architecture ARINC 429

Interface (4) receive channels (2) transmit channels Full data line rate support: low speed, high speed, and ARINC 575 Automatic slew rate adjustment Programmable Tx/Rx channel configuration Discrete I/O & Timing (8) user-programmable digital I/O lines (+35V avionics capable) IRIG-B time code input 1 pulse-per-second output 48-bit time stamp at 100 ns resolution IRIG-106 Chapter 10 monitor Power & Environment USB bus powered with external power option Operating temperature: -40°C to +85°C (standard); extended temperature hardware available Ruggedized portable and laboratory configurations available Key Features Dual-redundant 1553 architecture with simultaneous Bus Controller/Monitor operation Twinax connectors for standard avionics integration Lightweight, portable construction Includes BU-69092S MIL-STD-1553 AceXtreme® C SDK and DD-42992S ARINC 429 C SDK with source code samples Optional software: BusTrACer, ARINC 429 Data Bus Analyzer, ARINC 615 Data Loader, LabVIEW support, dataSIMS real-time analysis Typical Applications Product development, system integration, flight line test, software development, portable diagnostics, and bench troubleshooting of avionics equipment. Compatibility & Integration Available in single-protocol (1553-only, ARINC 429-only) or multi-I/O configurations. USB 2.0 interface; LabVIEW support available. Variant BU-67202U1 provides single dual-redundant 1553 channel with BC/Multi-RT/Monitor in compact form.

BU67X02U Characteristics / Specifications

PARAMETER	VALUE
Model	BU-67X02U
Also Known As	BU-67102U / BU-67202U / BU-67103U family
Instrument Type	USB avionics interface
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
Rugged Temperature	minus 40 C to plus 85 C on rugged USB board class
Sff Board Size	3.00 × 2.97 in (76.2 × 75.4 mm) on BU-67102Ux1
Time Stamp	48-bit / 100 ns on small-form-factor USB board
Coupling	transformer and/or direct coupled 1553
Sdk 15	BU-69092S AceXtremeCSDK
Sdk 4	DD-42992S ARINC 429 C SDK
Graphical Software	BusTrACEr, ARINC 429 DBA, ARINC 615 loader, LabVIEW, dataSIMS
Lab Sibling	BU-67103UX same I/O in non-rugged lab package
Populations	1553 only, 429 only, or 1553/429 multi-IO
Manufacturer	Data Device Corporation
Host Os	Windows XP Vista 7 8 10 and LinuxCSDKs on SFF board
Application Class	field service flight line and lab avionics I/O

BU67X02U Specifications

PARAMETER	VALUE
Applications	Field-service, flight-line, UAV, and lab 1553/429 simulation, monitoring, and data loading over USB.
Key Features	USB 2.0 portable 1553 and 429 multi-IO
Four ARINC 429 Rx and two Tx	IRIG-B in and 1 PPS out
Technical Specifications	Model: BU-67X02U

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-67102Ux1 small-form-factor USB board page.
Confirm 1553 channel count, 429 population, and rugged versus lab enclosure 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.