

DataBridge™ SDR2-USB

Serial Data Recorder

- Low-power
- Low-cost
- Small footprint
- Zero development time
- Records PC-compatible files



A cumen Instruments Corporation's DataBridge™ SDR2-USB is an easy way to add convenient USB data storage to any device or system.

The SDR2-USB captures data from any device equipped with a serial port and stores it in a PC-compatible file on a USB memory key, hard disk, or flash card reader.

No programming required.

The SDR2-USB is a hardware solution that is ready to deploy. Unlike competing solutions, no programming is required, and you don't need to install special application software. Configuration is accomplished via a file on the storage media.

Because the SDR2-USB records data to PC-compatible files, your files appear on a standard FAT32 drive letter and can be read with any computer with a USB port.

If you already use a computer or laptop for data collection, the SDR2-USB is a convenient drop-in replacement.

Low power consumption.

The SDR2-USB offers significant power savings over PC's, laptops, and embedded PC's, so batteries last 100 to 1000 times longer and no heat is generated.

The flexibility you need.

At Acumen, we know every application has unique requirements. You control when files are opened/closed, new file creation, and file naming. You can also incorporate date/time stamping with custom formats and millisecond precision.

The SDR2-USB supports arbitrary data port baud rates up to 921.6 kbps and alternative data word formats (e.g. 7E1).

Industry standard storage technology.

The SDR2-USB gives you access to industry-standard USB storage media. You benefit from competitive pricing, assured compatibility with your PC, and almost unlimited data capacity.

Options for OEMs.

A circuit board-only version of the SDR2-USB, the SDR2-OEM-USB, is available for integration with your product. Customizations and quantity discounts are also available.

See it for yourself.

The DataBridge SDR2-USB starter kit includes everything you need to begin right away. See our website or contact Acumen Instruments Corporation for details.



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Specifications

Data rates

50 to 921600 bps

Data formats

7/8 data bits

none/even/odd parity

1/2 stop bits

Handshaking modes

RTS/CTS (hardware handshaking)

Data buffering

16000 bytes

File format

PC-compatible Windows (FAT16 or FAT32 file system)

Storage device compatibility

USB memory key

USB flash reader

USB hard disk (may require external power)

Electrical interface

USB 2.0 (480 Mbit/s)

500 mA maximum power draw

Storage capacity

Limited only by storage device

Power requirements

5 to 30 VDC unregulated

900 mW (recording)

conditions: V_{in} = 12VDC, recording mode, 9600 bps, Kingston 1GB USB flash key

480 mW (idle)

conditions: V_{in} = 12VDC, idle – no storage device

Operating temperature

-40° to +85° Celsius (industrial temperature range)

Physical Characteristics

Dimensions

3.35" L × 3.76" W × 1.18" H

(85 mm × 96 mm × 30 mm)

Weight

8.0 oz (225 grams) without USB media

Enclosure

Extruded aluminum

Serial connector

DB9 male (DTE data port)

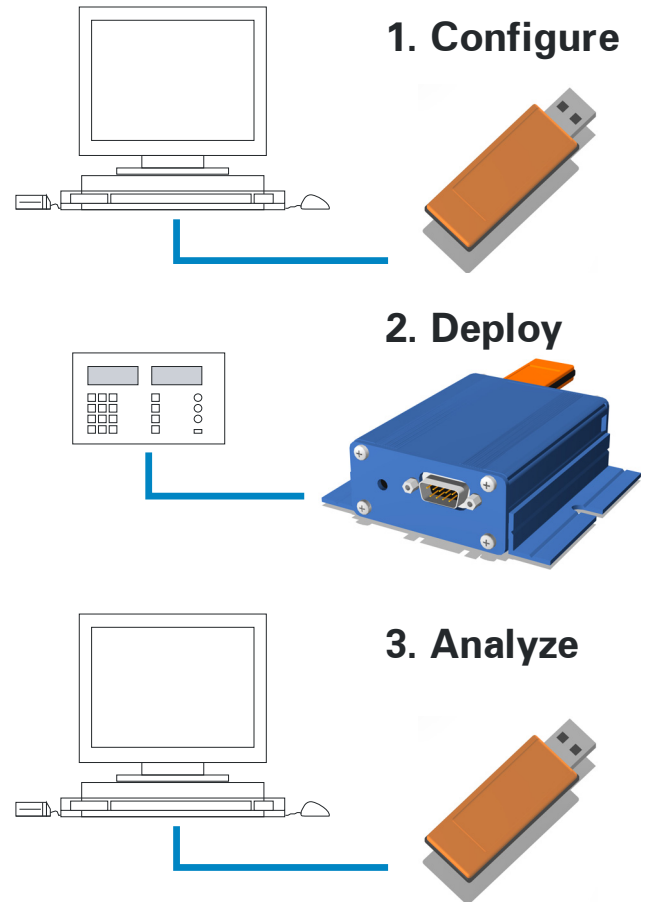
Drive connectors

USB "A" receptacle

Power mating connector (included)

1.3mm ID coaxial – center positive

CUI Stack PP3-002D



Media Options

Solid-state media

up to 1000 GB USB media

(limited only by storage device availability)

Notable Features

Data safety

Holdup circuit assures data integrity when power is unexpectedly lost

Power-up modes

Resume recording w/new filename, append to file

Scheduled file closing

1 second to 136 years or 1 byte to 4 GB

Time stamping

Optional date/time stamping of recorded data lines

Trigger on specified character or gap in data stream

Custom timestamp format with millisecond-precision



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