

DataBridge™ SDR2-CF

Serial Data Recorder



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

Acumen Instruments Corporation's DataBridge™ SDR2-CF is an improved version of the SDR-CF. It's the easy way to add convenient data storage to any device or system.

Like the SDR-CF, the SDR2-CF captures data from any device equipped with a serial port and stores it in a PC-compatible file on a CompactFlash card.

No programming required.

The SDR2-CF 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. All configuration is done using terminal software via your computer's serial port.

Because the SDR2-CF records data to PC-compatible files, your files appear on a standard drive letter and can be read with any CompactFlash card reader. The SDR2-CF adds support for the FAT32 file system for even greater compatibility.

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

Even lower power consumption.

The SDR2-CF 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 SDR2-CF now also operates from a wider input voltage range, further simplifying system integration.

For applications that demand it, the SDR2-CF also offers a low-power mode that further cuts power consumption and the ability to disable LED indicators for even more battery life.

The flexibility you need.

At Acumen, we know every application has unique requirements. For devices that require it, the SDR2-CF can send commands or messages to the attached device on initialization, shutdown, or at specific intervals. You also control when files are opened/closed, file naming, and date/time stamping.

With the SDR2-CF, we've gone a step further. The SDR2-CF now supports arbitrary data port baud rates up to 921,600 baud, the ability to send break characters to a device, and output messages with embedded binary codes.

Using the SDR2-CF's configuration port, you can connect to a computer to control and monitor your recording, download files, change recording settings, or communicate with your device using serial passthrough mode.

Industry standard storage technology.

The SDR2-CF gives you access to industry-standard CompactFlash solid-state 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-CF, the SDR2-OEM-CF, is available for integration with your product. Customizations and quantity discounts are also available.

See it for yourself.

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



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Serial Data Recorder

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

576 kBytes

File format

PC-compatible Windows (FAT16 or FAT32 file system)

Storage device compatibility

Devices conforming to the CompactFlash specification

Electrical interface

ATA (True IDE Mode)

Storage capacity

Limited only by storage device

Power requirements

5 to 30 VDC unregulated

350 mW (normal recording mode)

250 mW (low power mode)

100 mW (idle)

Operating temperature

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

Physical Characteristics

Dimensions

4.875" L × 3.375" W × 1.250" H

(12.4 cm × 8.57 cm × 3.12 cm)

Weight

8.5 oz (241 grams) without CF card

Enclosure

Extruded aluminum

Serial connectors

DB9 male (DTE data port)

DB9 female (DCE configuration port)

Drive connectors

CF connector with ejector

Media Options

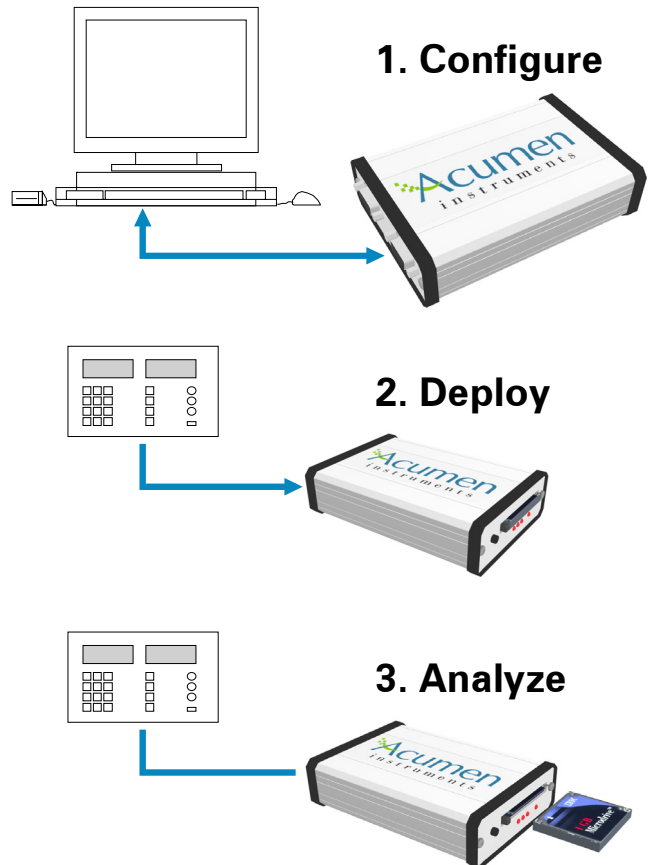
Solid-state media

up to 64 GB CompactFlash media
(limited only by FAT32 file system)



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Notable Features

Device control

Serial passthrough mode
(converts between baud rates if needed)
Send break character to data port

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

Output messages

Ten 256-byte strings, 1 second to 136 year output interval
(messages can also be sent at initialization or shutdown)

Download protocols

YModem batch, ASCII text