

# DataBridge™ SDR-CF

## Serial Data Recorder



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

**A**cumen Instruments Corporation's DataBridge SDR-CF is another way Acumen Instruments makes it easy to add data storage to any device or system.

The SDR-CF is a compact, rugged device that 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 SDR-CF is a hardware solution that is ready to deploy. Unlike embedded computers, no programming is required, and you don't need to install special application software. Configuration can be changed using any computer's serial port.

Because the SDR-CF records data to PC-compatible files, your files appear on a standard drive letter and can be read with any common CompactFlash card reader.

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

### **Low power consumption.**

The SDR-CF consumes less than 1 Watt, offering significant power savings over PC's, laptops, and embedded PC's, so batteries last 10 to 100 times longer and no heat is generated. The SDR-CF operates from a 7-30 VDC power supply, simplifying system integration.

### **The flexibility you need.**

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

Using the SDR-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 SDR-CF gives you access to industry-standard CompactFlash solid-state storage media. You benefit from competitive pricing as well as assured compatibility with your PC.

### **Options for OEMs.**

A board-only version of the SDR-CF, the SDR-OEM-CF, is available for integration with your product. Other OEM features include a remote panel interface connection. Customizations and quantity discounts are also available.

### **See it for yourself.**

The DataBridge SDR-CF starter kit includes everything needed to get started. See our web site or contact Acumen Instruments Corporation for details.



Acumen Instruments Corporation ■ 2625 N. Loop Drive Suite 2200 ■ Ames, IA 50010  
Voice: 515-296-5366 ■ Fax: 515-296-3554 ■ [www.acumeninstruments.com](http://www.acumeninstruments.com)

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## Serial Data Recorder

### Specifications

#### Data rates

2400 bps to 230.4 kbps

#### Handshaking modes

RTS/CTS (hardware handshaking)

#### File format

PC-compatible (DOS FAT16 file system)

#### Storage device compatibility

Devices conforming to the CompactFlash specification

#### Electrical interface

ATA/ATAPI (True IDE Mode)

#### Storage capacity

Limited only by storage device and FAT16 file system

#### Power requirements

7-30 VDC unregulated (under 1 W)

#### 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)

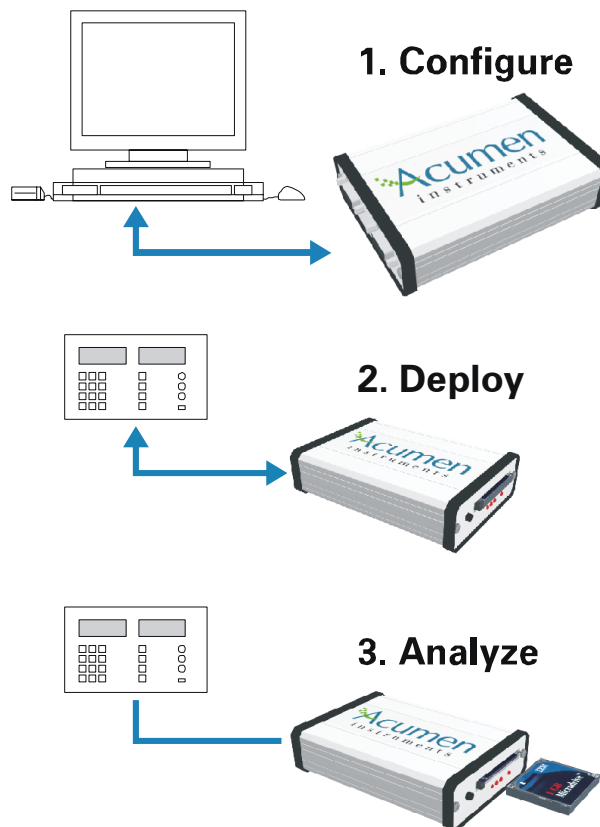
#### Drive connectors

Type I/II CompactFlash connector with ejector

### Media Options

#### Solid-state media

CompactFlash media - 8 MB to 2 GB  
(limited only by FAT16 file system)



### Notable Features

#### Serial download protocols

YModem batch, ASCII text

#### Power-up modes

Resume recording w/new filename, append to file

#### Real-time clock functions

Scheduled file closings every 1 second to 194 days  
Optional date/time stamping of recorded data

#### Output messages

8 256-byte strings  
1 second to 194 day output interval  
(messages can also be sent at initialization or shutdown)

#### Device control

Serial passthrough mode  
(converts between baud rates if needed)



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