

## DataBridge™ SDR-OEM Single-Board Serial Data Recorder

*Add data storage to anything.*

**A** acumen Instruments Corporation is pleased to announce DataBridge SDR-OEM — another way Acumen Instruments makes it easy to add data storage to any device.

The SDR-OEM brings you all of the features of Acumen's DataBridge SDR in a single compact circuit board. Like DataBridge SDR, the SDR-OEM captures data from any device equipped with a serial port and stores it in a PC-compatible file.

### **No programming required.**

The SDR-OEM 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. And, since the SDR-OEM uses a PC-compatible file format, you can access data like any file on your computer.

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

### **Choose your storage technology.**

The SDR-OEM gives you access to industry-standard ATA storage devices, including removable disk products, solid-state disks, and hard disk drives in ATA, PCMCIA, and CompactFlash form factors.

By choosing the SDR-OEM, you benefit from unlimited storage options. You can use removable media for quick archival and data transfer to a PC, or, for low power consumption, you can choose PCMCIA Flash cards. For long-term or high-data rate applications, equip the SDR-OEM with a hard disk drive.

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

At Acumen, we know every application has unique requirements. By featuring a fully configurable serial port, we ensure compatibility with a wide range of devices. For devices that require it, the SDR-OEM 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-OEM'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.

### **Customizable.**

We designed DataBridge SDR products with customization in mind. Acumen's modular architecture allows us to tailor the SDR-OEM's capabilities to meet your exact needs. Options such as analog and digital inputs, alternate data formats, and on-board data reduction are available. Contact us to discuss your requirements.

### **A single-chip solution.**

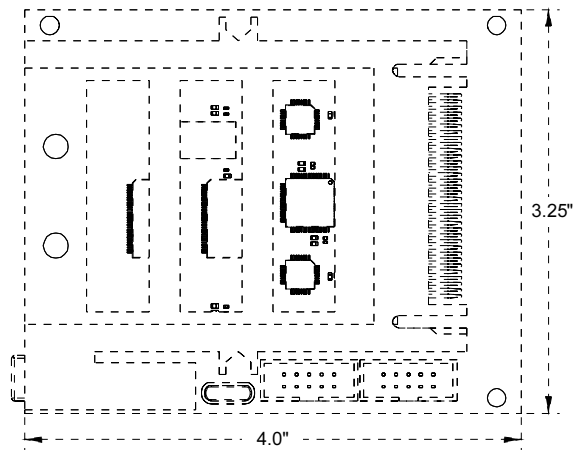
The SDR-OEM is built around the DataBridge integrated circuit. The DataBridge IC is the perfect solution for highly-integrated OEM designs, and is available in several package styles. With just a few support components, you can add data recording capabilities to your product.

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

The DataBridge SDR evaluation kit and reference design include everything needed to incorporate DataBridge SDR or the DataBridge IC in your application today.

# DataBridge™ SDR-OEM

## Single-Board Serial Data Recorder



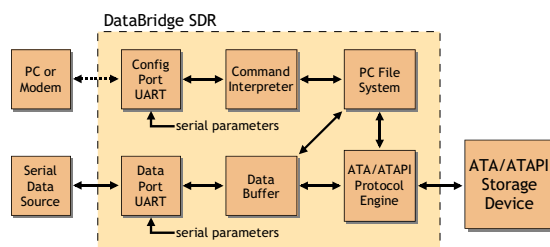
### Specifications

<b>Data rates:</b>	2400-230,400 bps
<b>Handshaking modes:</b>	RTS/CTS, DTR/DSR
<b>File format:</b>	PC-compatible (DOS FAT16 file system)
<b>Storage device compatibility:</b>	ANSI ATA/ATAPI standard T13
<b>Electrical interface:</b>	ATA
<b>Storage capacity:</b>	limited only by storage device and FAT16 file system
<b>Power requirements:</b>	5 VDC $\pm$ 5%, 50 mA (not including storage device)

### Physical Characteristics

<b>Dimensions:</b>	4.00" L $\times$ 3.00" W $\times$ 0.75" H (10.2 cm $\times$ 7.60 cm $\times$ 1.90 cm)
<b>Weight:</b>	1.0 oz (28.3 grams)
<b>Serial connectors:</b>	2-10-pin IDC connectors
<b>Drive connectors:</b>	PCMCIA Type I/II/III socket 40-pin 0.100" ATA drive connector

### Functional Diagram



### Notable Features

<b>Serial download protocols:</b>	XMODEM checksum, XMODEM-CRC, ASCII
<b>Power-up modes:</b>	Resume recording w/new filename, append to file, stop mode
<b>Scheduled file close interval:</b>	1 second to 194 days ( $2^{24}$ seconds)
<b>Event logging:</b>	8 kB of events logged
<b>Number of messages:</b>	10-256 byte strings
<b>Message interval:</b>	1 second to 194 days ( $2^{24}$ seconds) (messages can also be sent at initialization or shutdown)
<b>Device control:</b>	serial passthrough mode (converts baud rates when needed)

### Media Options

<b>Removable media:</b>	Iomega Zip™ (100 MB), Iomega Clik! (40 MB)
<b>Solid-state media:</b>	PCMCIA ATA Flash cards CompactFlash (8 MB to 1 GB)
<b>Hard drives:</b>	PCMCIA hard disks (240-1040 MB) 2.5" and 3.5" ATA/ATAPI hard disks (2-40 GB)

### Ordering Information

Contact Acumen Instruments Corporation for details.

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