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### **9B Series Isolated I/O to Serial Data –**

Over 75% of the industrialized world still uses RS-232 or RS-485 serial data communications to acquire process variable information and to control associated electrical / electronic systems. Each of Dataforth's SCM9B modules offers a complete data acquisition system to measure temperature, pressure, voltage, current and various types of digital signals into any host with standard RS-232C or RS-485 port.

The SCM9B modules perform signal conditioning, scaling, linearization and conversion to engineering units. Most models also provide digital I/O lines for controlling devices through solid state relays or over TTL signal lines. These digital I/O lines, along with built-in limit capabilities, provide alarm and control outputs.

The SCM9B family contains no pots or switches to set! Features such as address, baud rate, parity, alarms, echo, etc. are selectable using simple commands over the communications port - without requiring physical access to the module. Commands are sent to the module via ASCII or Modbus RTU protocols. All selections are stored in non-volatile EEPROM that holds setup data even if power is removed.

Complimentary configuration and utility software is included with each product shipment. The software is compatible with Windows 95,98,ME,NT and 2000 operating systems and is distributed free on CD-ROM.

All our SCM9B products use simple command / response protocol for communications. Modules must be interrogated to obtain data. Depending on the module used, you might use up to 10 or 20 various commands – a relatively simple instruction set!

Although each module converts input to output at a rate of only 8 conversions per second, modules can be scanned at up to 250 channels per second. Data can be transmitted at up to 115.2K baud and you can connect up to 124 modules on one host serial port using a multidrop RS-485 port.

Here's some other key performance and operating features:

500V rms analog input isolation

15 bit measurement resolution (1 part in 32,768)

Continuous self-calibration

Uses +10V to +30V supply power