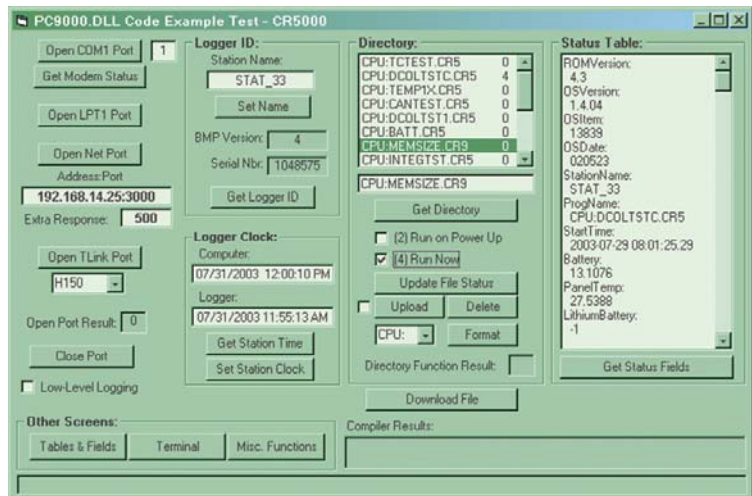# Software Development Kit
PC9000-SDK

PC9000-SDK allows software developers to create custom datalogger application programs using a Microsoft® Windows 32-bit programming language such as Visual Basic, Borland® Delphi, or C++. PC9000-SDK includes a call-level DLL that provides a full and varied set of datalogger control and data collection functions. The DLL has no Windows or CSI server dependencies, simplifying application deployment in most cases.

PC9000-SDK is tailored toward direct, high-speed, real-time communications between the PC and a single datalogger. It presently supports communications with CR9000(X) and CR5000 dataloggers only.

Functions Supported

Software developers can create custom datalogger application programs that:

- Communicate through an RS-232 interface (CR5000, CR9000X only), ethernet interface (NL100, NL105, or CR9000X's onboard 10baseT/100baseT port), PLA100 Parallel Link Adapter (CR9000 only), or BLC100 Bus Link Card (CR9000 only).

- Set datalogger clock, station names, and values of public table variables

- Provide a datalogger file directory

- Start/stop programs

- Send/retrieve/delete programs and files (does not include file creation functions for CRBasic file editing or program generation)

- Query datalogger status fields, datalogger output tables, and field structures

- Collect simple, single-value data or large blocks of data

- Use MS Date/Time format for datalogger timestamps allowing simple conversions and plotting

- Optimize retrieval of large FFT/Histogram arrays

- Access low-level serial ports for modem/radio control (control strings/routines not provided)

- Provide simple return codes to indicate success or failure of function calls

- Use Basic C data types for single-threaded, no callbacks, and calling parameters. Basic C data types are "Visual Basic-safe".

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System Requirements

- Windows 32-bit operating systems (Windows 95 SR1 and later)

- The minimum recommended hardware is a 133 MHz processor with 32 MB of RAM. Some computer operating systems and application development environments may require a faster processor and/or more RAM.

Files Included

- Redistributable binary DLL file (no run-time license fees)

- Redistributable parallel port device driver (required only for PLA100 access to the CR9000 on Windows NT/2000/XP operating systems)

- Detailed reference manual and developer license

- Example programs in Visual Basic

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