



H2NS Environmental Presents the CPP-4794 The Next Generation

Serial Data Collection

The CPP-4794 represents the next generation of data logging and offers serial interfacing to instruments as well as supporting the traditional analog approach using an analog to digital converter. Over a single RS-232 cable, the CPP can collect data, status and control the calibrations of connected instrumentation. This approach simplifies wiring, documentation and increases system reliability. In those instruments that support a time/date download, the CPP keeps the entire system time synchronized. The diagram on the front of this brochure depicts a modern day collection environment.

Pass Through to Instruments

The CPP-4794 also offers an unabated pass through mode that allows a user to make a direct connection with an instrument that is connected to the CPP, passing signals through the CPP, unabated. This allows manufacturer supplied diagnostic routines to be conducted on instruments from a remote location, e.g., your facility or even the instrument manufacturer's facility. The CPP continues to collect data from all other connected instrumentation.

12 Independent Serial Ports

Up to 12 independent serial ports can be installed in the CPP. One serial port is used for an on site operator, another is used to communicate and transfer data to a central polling facility. The remainder of the serial ports can be used to interface to instrumentation. One of the ports can be used to provide a Modbus output from the CPP, or other special protocols, as needed.

Data Storage/Security

The battery backed, internal memory in the CPP can store over 3,000 data values for ten channels. For hourly averages, this translates into 3,000 hours of data for ten channels. However, given all that can happen at a remote location such as power surges, brownouts, lightning, and operator mishaps, the CPP also offers data storage on a 64meg, industrial grade, Compact Flash Memory Card. This provides an additional degree of buffering from circumstances that can affect data collected and stored on site. Years of hourly data can be stored on the Compact Flash Memory Card.



Below are some of the features of the CPP-4794

- 40 channel units
- 12 independent serial ports
 - ◊ RS-232, RS-422, RS-485
 - ◊ Polled or broadcast interfacing
 - ◊ Serial interfaces and control for all major instrument manufacturers
- 16/32 A/D inputs –optically isolated
 - ◊ Selectable gain ranges
 - ◊ Isolated inputs available
- 16/32/48 Digital inputs – optically isolated
- 16/32/48 Relay outputs
- Selectable averaging intervals
- Selectable rolling averages
- Channel to channel calculations
- Instrument calibrations
 - ◊ Controlled by internal clock
 - ◊ Controlled by external signals
 - ◊ Controlled by both
 - ◊ Calibrations controlled over serial ports
 - ◊ Serial control of mass flow calibrators
- Parallel printer port
- Boolean functions
- Curve fit capabilities
- Data validation/purges/blowbacks
- Assign labels to all digital I/O
 - ◊ Assign labels to sequencers
 - ◊ Assign labels to Boolean functions
 - ◊ Assign labels to alarms
- Supports external I/O devices
 - ◊ External digital I/O
 - ◊ External analog I/O
 - ◊ Dutec/OptoMux compatible
 - ◊ Modbus RTU Protocol
 - ◊ Modbus ASCII protocol
 - ◊ 4-20mA outputs available
- Internal Ethernet/Modem option
- Simultaneous polling from two centrals
- Meteorological calculations
 - Vector/scalar WS/WD
 - ◊ Sigma Theta - 2 types
 - ◊ Sigma W
 - ◊ Rainfall
 - ◊ Serial data collection
 - ◊ Direct met interfacing
- Password protection
 - ◊ Three levels password
- Sequencers
 - Calibrations
 - Blowbacks
 - Stream switching
- Control
 - Front panel LCD/control
- Pluggable connections
 - Real time clock
- Battery backup for clock/memory
 - 120/240 or DC operation
 - Rear panel voltages
 - Alarming
 - High/low warnings
 - High/low alarming
- Assign labels to alarms
 - Up/Dn load system configuration
 - Data transfers
 - Comma delimited ASCII
- Compact Flash for long term data storage - 64meg CFM
- Modbus I/O
 - ◊ Output #/hr, #/mBTU,
 - ◊ Output corrected data to central or DCS
- Special protocol outputs

Operational Features

CPP Set Up

The CPP can be set up to meet any environmental monitoring application. The CPP is set up over a serial port in a question answer narrative with the user. The set up can be done locally or from a remote location over a modem. The CPP presents a Main Menu and selections from this menu allow the user to fully configure the CPP. The CPP configuration can be saved in several locations. First, every CPP has an on board EEPROM to save the configuration. Secondly, the configuration can be uploaded to the Compact Flash Memory Card. And, thirdly, the configuration can be uploaded to a PC using DataLink. Conversely, stored configurations can be downloaded into a CPP from any of the three storage locations.

The CPP gets data from either an analog input, a serial connection, or operator entered parameters. All data is converted into a common database and processed and stored. Stored data can be retrieved in operator readable formats or in comma delimited, ASCII strings.

Serial Data Collection

Serial data collection allows a single, four-wire telephone cable to be connected between the CPP and an instrument. Over this single connection, the CPP collects data, status, instrument warnings, and either detects or initiates calibration sequences in the instrument. The CPP has an on line mode whereby a user can communicate with connected instrumentation without interrupting data collection by the CPP. An off line, unabated pass through mode is also available that affords the user a direct connection with any connected instrument. This direct connection can also be conducted remotely over a modem.

Reports

The CPP responds to a series of commands that results in stored data being output in operator readable formats. Included in the reports are data summaries, calibration results, alarms, power failures, operator messages, error messages, and configuration set up. The CPP can also be set up to automatically output selected reports to an on site printer, if hardcopy is needed.

Front Panel

The CPP has a front panel LCD display that allows a user to view all collected and stored data as well. Commands to control the digital I/O can also be initiated from the front panel, as well as entering some parameters, such as calibration gas concentrations. The CPP offers two standard "Custom Screens" that allows the user to set up parameters to be displayed that are routinely monitored for system operation.

Digital Weighted Averaging

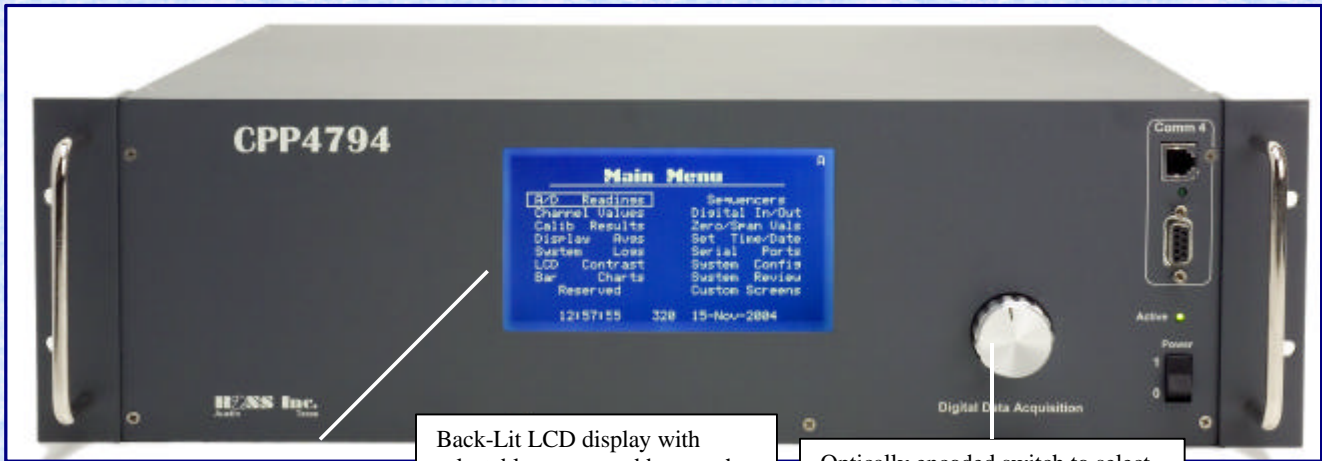
This feature allows the monitoring of specified digital I/O points that can be included in the database stored in the CPP. This allows the occurrence of external events that may affect collected data to be saved with the database.

H₂ NS Environmental, Inc.

P.O. Box 500207 Austin, Texas 78729

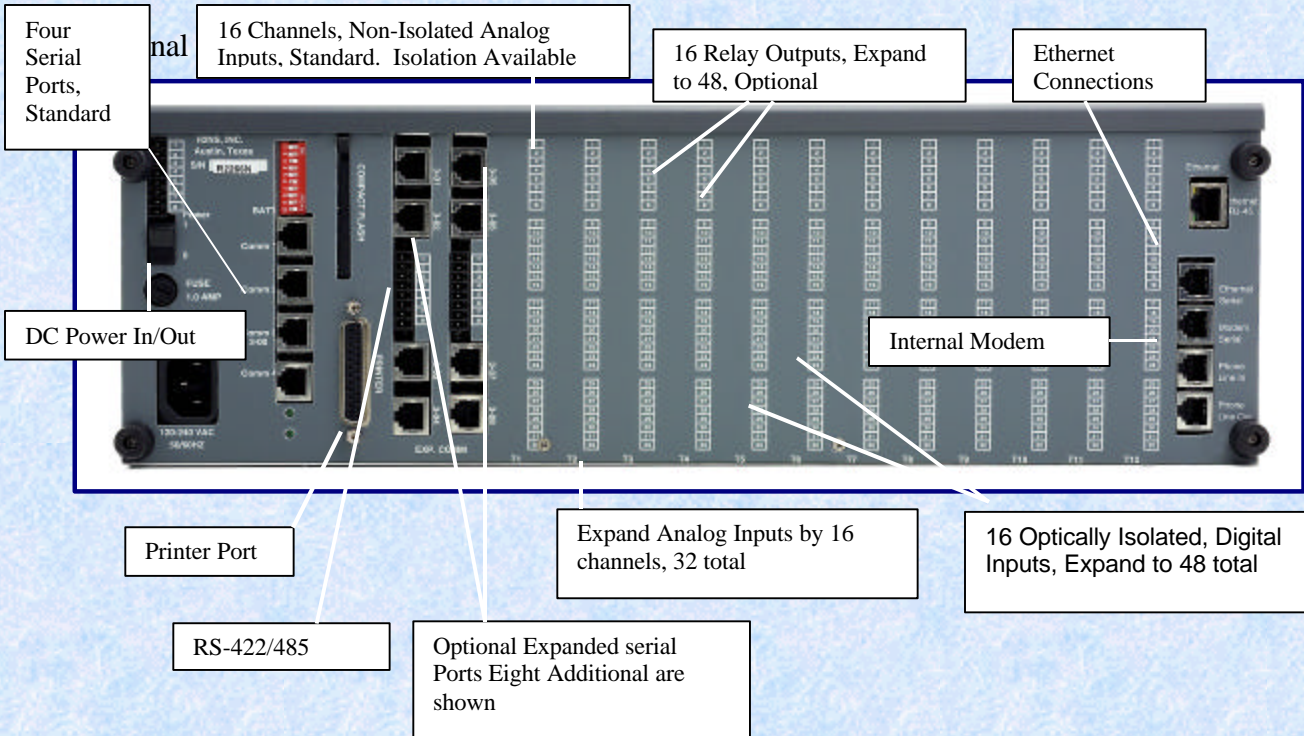
Ph: (512) 918-8035 Fax: (512)-918-9684

Web: www.h2ns.com email: sales@h2ns.com



Back-Lit LCD display with selectable menus and bar graph presentation of channel values

Optically encoded switch to select menus and manage the LCD display



Four Serial Ports, Standard

16 Channels, Non-Isolated Analog Inputs, Standard. Isolation Available

16 Relay Outputs, Expand to 48, Optional

Ethernet Connections

DC Power In/Out

Internal Modem

Printer Port

Expand Analog Inputs by 16 channels, 32 total

16 Optically Isolated, Digital Inputs, Expand to 48 total

RS-422/485

Optional Expanded serial Ports Eight Additional are shown

H2NS Environmental Inc.
 P.O. Box 500207 Austin, Texas 78729 U.S.A.
 Ph: (512) 918-8035 Fax: (512) 918-9684
 Email: sales@h2ns.com Home: www.h2ns.com