Easy to Implement and Maintain SCADA Systems for Small Utilities

**Continuously Monitor ...**
Pressure, Level, Flow, Voltage, Current, Power, Temperature, pH, Cl, O₂, Turbidity, Contacts

**and Control ...**
Pumps, Valves, Gates, Motor Controllers, Contactors

**at Remote Sites ...**
Wells, Canals, Reservoirs, Processing Plants, Pumping Stations, Storage Tanks, Substations

**Automatically Alert via ...**
Telephone, Pager, E-Mail, PA System, Alarm Signals, Computer Displays

A Fully User-Configurable System
With all the features and capabilities of a large SCADA system, CIMScan was designed with the needs of the small to medium-sized water/wastewater utility specifically in mind. The product monitors every aspect of the water cycle from initial acquisition to treated waste discharge.

With CIMScan, all of the necessary monitoring, control, communications, and processing components are available in a single, integrated package that is both easy to understand and apply. The following diagram illustrates system's straightforward architecture.

### Graphic Displays
Impressive HMI displays can be created on any Windows-supported graphic background. CIMScan provides all the essential graphic objects to display current values, alarm conditions, equipment states, etc. Buttons, selectors, entry boxes, and sliders are available to implement user control.

### Charts & Graphs
Any number of trend charts, real-time bar charts, and scatter graphs can be created to plot data, either periodically or on event. There is virtually no limit to the number of traces that can be plotted on a single chart. With full pan and zoom capabilities, the user can easily zero in on significant data.

### Spreadsheets of Values
Any number of spreadsheets can be easily set up to display the current values of datapoints in the system, in either tabular or matrix form. Additional information, such as the timestamp, alarm status, and units of measure, can be shown for each point. The operator can use these value lists to reset datapoints, turn switches off and on, and perform other control functions.

### Alarms and Alerts
Up to 5 alarm limits can be defined for each analog point. Discretes can also generate alarms. Alarms are displayed in a system alarm list, logged, and can trigger "Actions." Actions can update setpoints, load recipes, turn outputs on or off, or display messages (to name just a few). Messages are user-defined and can contain real-time data. Messages can be delivered via e-mail, telephone, pager, or PA system.

### Logging and Reporting
CIMScan can be configured to produce any number of log files in either ASCII text or binary formats. Each entry in a file is time stamped. Logs can be updated periodically or on event. The CIMPrint report utility is provided free of charge for the quick creation of simple reports. More complex documents can be easily generated by importing log files into Microsoft Excel or a similar spreadsheet. CIMScan can even be configured to write directly to an Excel sheet or a database like Access or Oracle.

### Communications
A wide range of possibilities are available for communications between the remote eLink RTU's and the CIMScan SCADA host. Because of CIMScan's remote data buffering capability and "report by exception" design, slow-speed dial-up and leased-line telephone links can effectively transfer data. In addition, both licensed and unlicensed wireless links can be easily implemented, as well as fiber optic communications.
**eLink-III** Provides Very Cost-Effective RTU Solution

**PodNet Port Ethernet Port**
- **Casted Aluminum Enclosure**
- **Optional Ports for**
  - Bar Code Readers
  - Instruments
  - Controllers
  - PLCs, etc.

**DIN Rail Mountable**
- **Serial Expansion Ports**
- **Digital I/O & Alarm Output (Relay)**

**eLink-III Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temp. Range</td>
<td>-40~70 °C</td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>5-95%</td>
</tr>
<tr>
<td>Operating Voltage</td>
<td>10-30 Vdc</td>
</tr>
<tr>
<td>Maximum Power Required</td>
<td>1.5 W.</td>
</tr>
<tr>
<td>Memory &amp; Clock</td>
<td>Battery</td>
</tr>
<tr>
<td>Processor</td>
<td>44 MHz</td>
</tr>
<tr>
<td>RS-485 PodNet Port</td>
<td>1</td>
</tr>
<tr>
<td>RS-232 Serial Ports</td>
<td>2</td>
</tr>
<tr>
<td>LAN Interface Port</td>
<td>100-Base-T</td>
</tr>
<tr>
<td>Slow Speed Protocol</td>
<td>Modbus</td>
</tr>
<tr>
<td>Serial Expansion Ports</td>
<td>2</td>
</tr>
<tr>
<td>Digital I/O</td>
<td>3-In, 2-Out</td>
</tr>
<tr>
<td>Maximum Input Voltage</td>
<td>36 Vdc</td>
</tr>
<tr>
<td>Output Drive (open coll.)</td>
<td>750 ma.</td>
</tr>
<tr>
<td>Alarm Relay</td>
<td>SPDT</td>
</tr>
<tr>
<td>Indicators</td>
<td>4 LED</td>
</tr>
</tbody>
</table>

**RF Modem**

**Part No.**

- **PD-01**: PodNet RS-485 Repeater
- **PD-02**: RS-232 to PodNet Converter
- **PD-03**: Fiber Optic Converter
- **PD-04**: Programmable Interface
- **PD-07**: 900 MHz RF Modem
- **PD-08**: 2.4 GHz RF Modem
- **PD-11,12**: 1-ch Voltage/TC Pod
- **PD-13,15**: 1, 6-ch RTD Input Pod
- **PD-16**: Multi-function Pod
- **PD-17**: 8-ch Analog Input Pod
- **PD-18**: 8-ch Thermocouple Pod
- **PD-19**: 8-ch Universal Input Pod
- **PD-21, 24**: 1, 4-ch Analog Output Pod
- **PD-50**: 7-in, 8-out Digital I/O Pod
- **PD-51**: 16-ch Digital Input Pod
- **PD-52**: 8-ch Isolated Input Pod
- **PD-53**: 16-ch Contact Input Pod
- **PD-55**: 8-Input, 8-Output Pod
- **PD-56**: 4-ch Relay Output Pod
- **PD-60**: 4-ch Relay Output Pod
- **PD-61**: 2-counters + 3 DIO
- **PD-62**: Flow Meter Input Pod
- **PD-82**: Flow Meter Input Pod
- **PD-83**: Quadrature Input Pod

**I/O Pods** Interface Directly to Sensors, Instruments, or Equipment

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**Twisted Pair**

**Wireless**

**Telephone Co.**

**SCADA Master**
- **Treatment Plant**
- **Purification Plant**
- **Storage Tank**
- **WW Lift Station**
- **Pumping Station**
- **Well**
- **RF Repeater**
NO-RISK, ready to run, data acquisition, monitoring, and control systems

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