SmartMaster™

Built on 25 years of experience, our third generation electric power generation and distribution management control system performs SCADA, load management, capacitor control, and meter reading functions. Also used by gas and water utilities.

Features

Fully programmable data acquisition and control logic via built in T-SQL compiler.

Interactive one line diagrams.

Event notifications via electronic mail and SMS (cell phone) messages. Multiple channels can be used for redundancy.

Accessible from anywhere – local machine, any local area network workstation, or any computer on the internet.

Security

System security is implemented through Microsoft SQL 2012 Server. All of the latest encryption, authentication and authorization methods of the SQL server are utilized.

Communications

SmartMaster™ can communicate with devices on one communications channel, or as many channels as needed simultaneously. Popular communications protocols are supported. Multiple protocols can run over the same channel. Communications can go over Ethernet or serial connections, or via any other medium when appropriate converters are used (e.g. radio, fiber optic cables, cellular modems, etc.).

Scalability

SmartMaster™ can run on a small computer, or a large server. It can serve customers monitoring a couple of inputs only, or as many inputs and outputs as communications infrastructure will allow. New system components can be added at a later date, and database can grow at a pace required by local needs. The system can be monitored from anywhere on the internet.

Database Engine

SmartMaster™ is based on Microsoft SQL 2012 Server, a full size, industrial strength SQL database management system currently serving the needs of some of the major organizations. Its maximum database size of over 500 petabytes provides an essentially infinite database size for large data and event log archives.

Accessories

In addition to the various real time screens that the user interface offers, several integrated and stand-alone programs are available for system operation, control, and monitoring:

Database Editor – used for system parameter viewing, modification, printing and exporting.

Event Viewer – used for real time viewing searching, printing, exporting, and management of system events and alarms.

Data Viewer – used for real time viewing searching, printing, and exporting of recorded data. Real time trending screens can be set up for any input or output defined in the database.

Reports

A special server component is dedicated to management, definition, generation, and dispatching of reports. Management can be done through SmartMaster™ user interface, or via a web browser.

Users can define custom reports with little or no programming. Reports can contain tables, various kinds of charts, plots, and gauges. They can be rendered in html, pdf, Excel, Word, etc.

Reports can be generated manually, or on a scheduled basis.

Reports can be dispatched to selected lists of users via electronic mail on a one time, or subscription basis. In the latter case reports are sent out to mailing lists periodically as needed.

Security can be defined so users can access only reports that they are entitled to see.