

Graphical Information Display

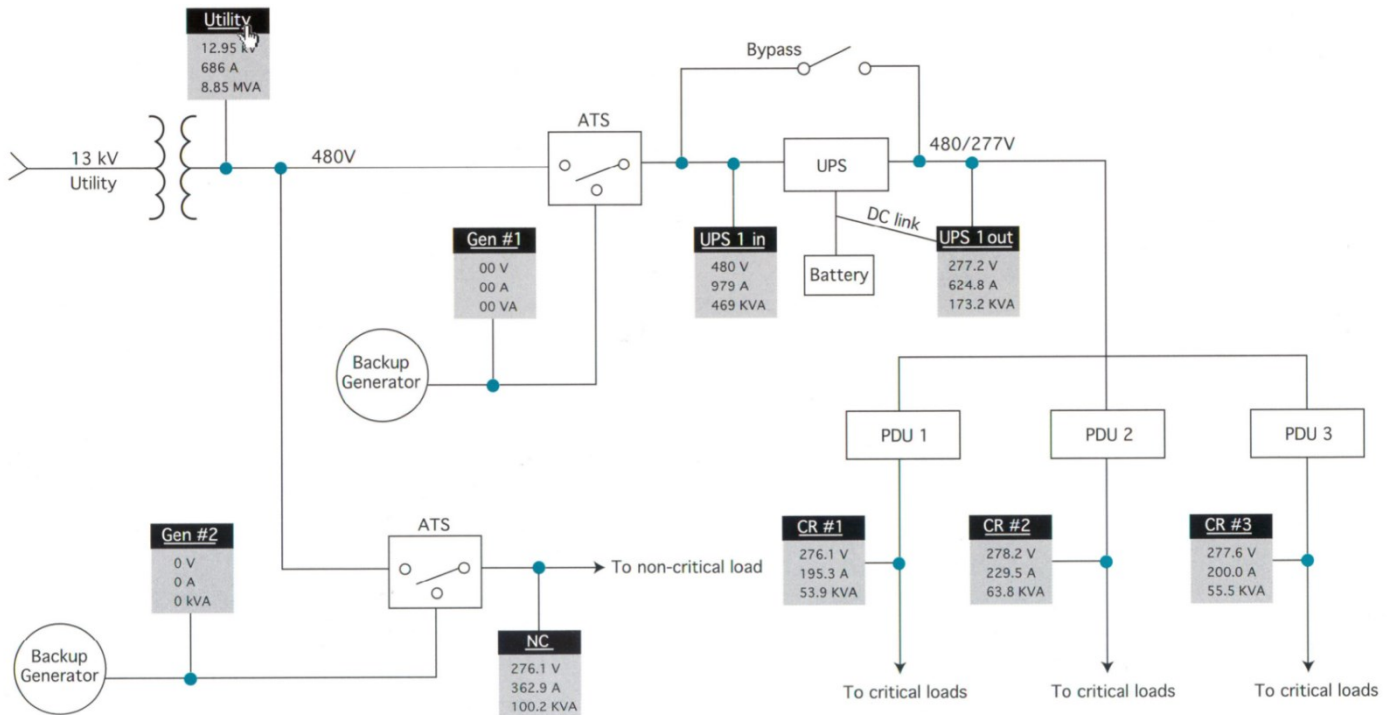
A Quick, Customized Solution for Your Encore Series System®

Having the ability to display real time metering and power quality event data in a context familiar to a facility manager is an indispensable problem solving tool. Some facilities have systems that provide real-time power and process parameter status on customized workstations, but none can integrate this information with power quality and reliability information in a single, web-based display accessible to anyone who needs it like the Encore System can. Used in conjunction with the Encore Series System, a facility manager can readily:

- Establish a reliability-based maintenance protocol
- Pinpoint the exact source and cause of power quality problems
- Identify inadequacies in a facility's wiring, grounding and power infrastructure equipment before they cause problems
- Maximize electrical system uptime and performance

A realtime graphical display that integrates power and process data, and shows it in relation to location.

Since many facility managers rely upon real-time data to make decisions about their power systems, Dranetz and Electrotek Concepts developed SW-Online, a Graphical Information Display AnswerModule®. This AnswerModule takes advantage of the web-based architecture and flexibility of the Encore Series System by overlaying live data with floor plans, one-line diagrams, and other pictorial representations of a facility's monitoring system.



Utility
12.95 kV
686 A
8.85 MVA

1. The web page can be reached by clicking on the Custom Web Page link on the InfoNode® home page

2. Clicking on the data block title brings up another window containing the event summary table for that particular DataNode®

Event Time	Monitor	Event	Details
2002-10-14 07:15:29.57	H09_5530	Transient	Instantaneous Voltage C Mag = 409. V (1.04pu), Max Deviation (Peak-to-Peak) = 166. V (0.42pu), Dur = 1.433 ms (0.09 cyc), Upstream Capacitor Switching
2002-10-14 04:54:20.71	H09_5530	Transient	Instantaneous Voltage B Mag = 520. V (1.33pu), Max Deviation (Peak-to-Peak) = 299. V (0.76pu), Dur = 33.67 ms (2.14 cyc), Frequency = 2.453. Hz, Category = 4, Upstream Capacitor Switching
2002-10-13 10:00:10.36	H09_5530	Transient	Instantaneous Voltage C Mag = 480. V (1.23pu), Max Deviation (Peak-to-Peak) = 165. V (0.42pu), Dur = 4.167 ms (0.25 cyc), Frequency = 300. Hz, Category = 3, Upstream Capacitor Switching
2002-10-13 09:11:27.54	H09_5530	Instantaneous Sag	Rms Voltage B Mag = 245. V (0.88pu)
2002-10-13 05:04:48.82	H09_5530	Transient	Instantaneous Voltage A
2002-10-13 04:54:21.63	H09_5530	Transient	Instantaneous Voltage A
2002-10-13 04:54:21.18	H09_5530	Transient	Instantaneous Voltage B

3. Event detail can be obtained by clicking on the hyperlink in the event summary table

As illustrated, the real-time graphical information display depicts key components of the power system being monitored at the locations of DataNodes or individual measurement instruments installed on the system. The diagram displays information about each particular DataNode, including its health and a data collection profile. When you click on the location block for a DataNode, if data has been collected, you will see an event list for data collected by that instrument. You can then click on individual entries to learn more about a particular event. This interface enables you to view and analyze collected data in relation to the location of the monitoring instrument on the power system, to quickly evaluate a situation, and take corrective action.

Specifications for Graphical Information Display AnswerModule

Operating Environment

- Installed in any InfoNode or Encore Series Software
- Real-time data blocks can be overlaid on any JPEG, GIF, or PNG image

Inputs

- Supports the 5530, 5540, 5560, 5590, and 61000 Series DataNodes

Outputs

- Displays DataNode name, voltage, current and three phase total apparent power. The data block title changes color to indicate a triggered event has occurred within the last 48 hours.
- The AnswerModule checks for new events to update the data block title status every minute. There are customization options available based on specific needs.