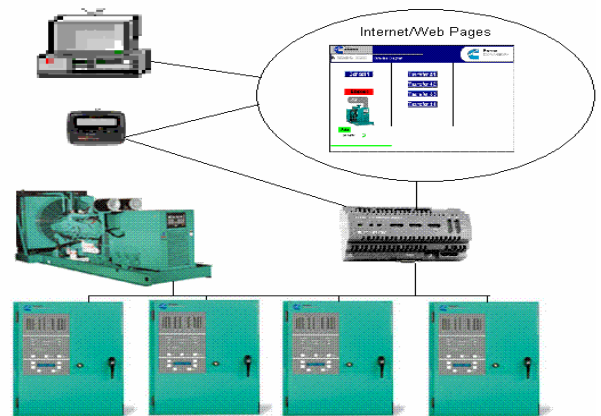


PowerCommand™ iWatch™ 100

Remote Network Monitoring



Description

The PowerCommand™ iWatch™ 100 system provides convenient means for remotely monitoring generator sets and transfer switches that are interconnected with a Cummins Echelon LonWorks™ network using an Internet Explorer browser operating on a remote personal computer (PC).

The use of a browser rather than dedicated software for remote monitoring eliminates the need for dedicated monitoring software on the monitoring PC, and allows any authorized user on the customer's network to monitor the equipment. Many users can monitor the generator or transfer equipment simultaneously. Access to the monitored site requires set up of the user on the system by an administrator, and use of a password for each user.

PowerCommand iWatch 100 users can monitor generator set data including engine data, alternator data, and control system status. They can start or stop the generator set. The user can also monitor connected transfer switches for status (source availability, source data and source connected) as well as load level (when the transfer switch is provided with that feature).

Features

- **Easy Access to Generator Set and Transfer Switch Data.** Allows access to information over any personal computer without the problems associated with loading software and keeping it up to date.
- **Easy to Use and Understand Graphical Interface.** Data is presented to user in a pictorial format that is easy to understand. The graphical displays provide comprehensive data without complexity.
- **Allows Equipment to Page for Service on Alarms.** The control system monitors generator sets and transfer switches for alarm conditions, and pages designated technicians based on a configurable priority and schedule.
- **Sends Emails on Alarm Conditions.** Allows generator set and transfer switches to send email messages on alarm conditions using an SMTP server.
- **Configurable for User Access Codes.** Allows for configurable user names and passwords.
- **Local Data Logging.** The PowerCommand iWatch 100 system can be configured for data-logging parameters on the network. Data stored may be accessed via either local or remote PC's.
- **Certifications.** UL listed, CE and FCC compliant.
- **Warranty and Service.** Backed by the standard PowerCommand Network and Accessory/Parts Warranty and worldwide distributor service network.

System Description

The PowerCommand iWatch 100 system is composed of several major groups of equipment and software. The generator sets, transfer switches, and other equipment monitored at a site are interconnected with a Cummins PowerCommand LonWorks network. The network is connected to the PowerCommand iWatch 100 hardware module, which is connected to a TCP/IP Ethernet connection. Optionally, the PowerCommand iWatch 100 hardware module may also be connected to a telephone service line, so that the control may dial out on alarms and send messages to a pager service; or the control may be accessed through the modem for browsing.

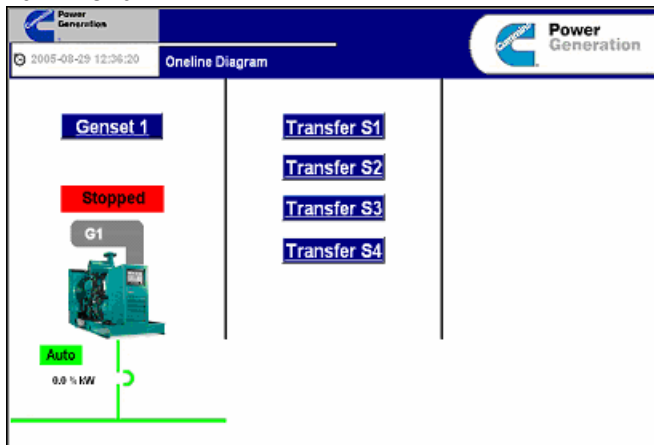
The standard system consists of one genset and up to 4 transfer switches. PowerCommand iWatch 100 can be customized by CPG for monitoring and control of up to 15 devices.

PowerCommand LonWorks Network

PowerCommand generator sets and transfer switches can be provided with network interface modules to allow direct monitoring and control by an Echelon LonWorks network.

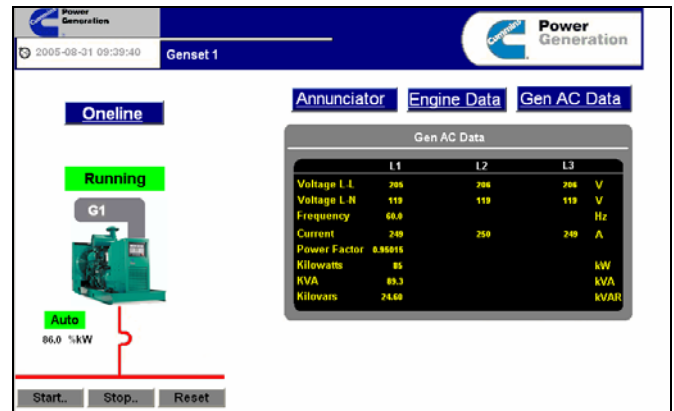
Typical Information Displays

Main Menu



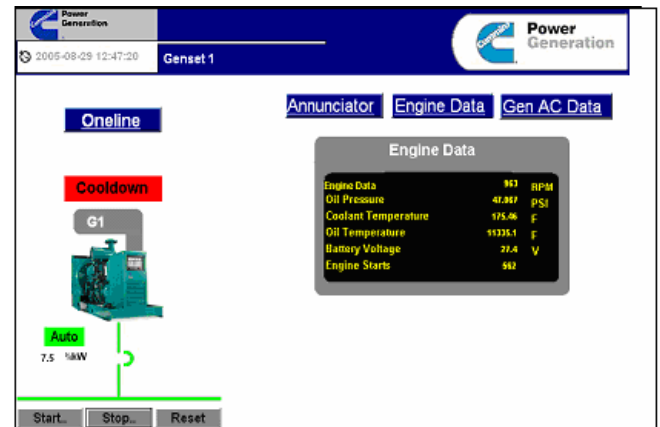
The main menu screen displays the equipment monitored by the PowerCommand iWatch 100 that is connected. It also displays the basic status of genset in the network. The user may click on a component that is displayed to navigate to other system displays.

Generator Set AC Data Display



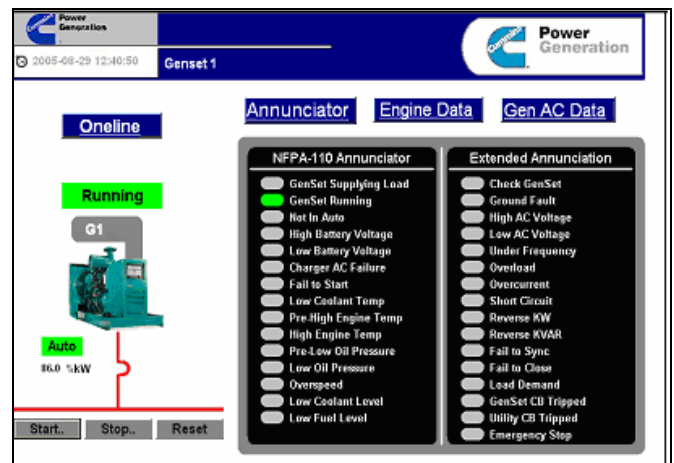
The generator set AC data display screen provides information on the current AC voltage, current, frequency, power factor, kW, kVA, and kVAR output of the generator set monitored. The screen also allows manual starting, stopping, and fault reset of the generator set.

Generator Set Engine Data Display



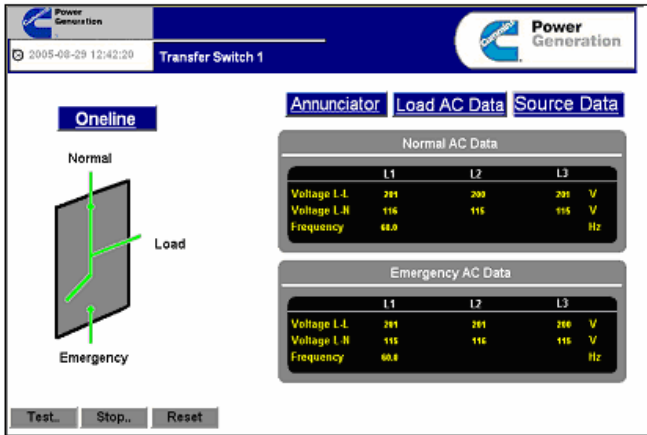
The generator set engine data display provides detailed information on the state of the engine, including speed, oil pressure, coolant temperature, oil temperature, battery voltage, and number of starts. Units of measurement are configurable for either US Standard or Metric values. The screen also allows manual starting, stopping and fault reset of the generator.

Remote Genset Annunciator Display



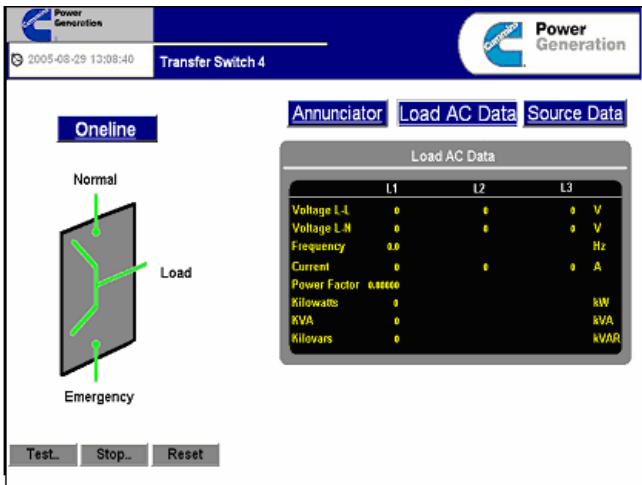
This display emulates operation of genset annunciators, providing status condition on one screen for the major components in the system and full set of NFPA110 Alarms. The screen also allows manual starting, stopping and fault reset of the generator set.

Transfer Switch Source Data Display



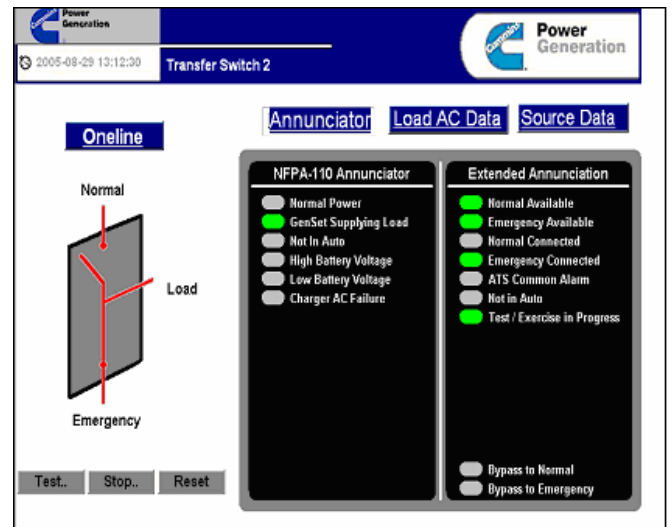
This screen graphically shows the status of the transfer switch by depiction of the connected source with the normal source and generator source switches shown as either open or closed. The display also provides tabular data covering the individual phase voltage and frequency for each source. The screen also allows manual testing and fault reset of the transfer switch.

Transfer Switch Load Data Display



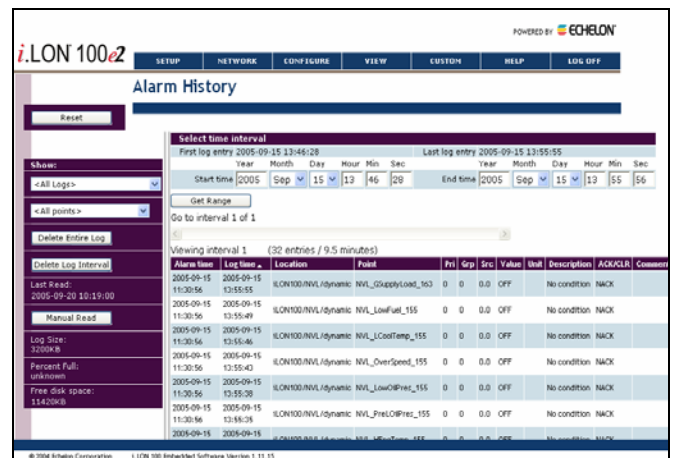
This screen graphically shows the status of the transfer switch by depiction of the connected source with the normal source and generator source switches shown as either open or closed. The display also provides tabular data covering the individual phase voltage, individual phase load current, power factor, frequency, kW, kVA, and kW hours. The screen also allows manual testing and fault reset of the transfer switch.

Remote ATS Annunciator Display



This display emulates operation of ATS annunciators, providing status condition on one screen for the major components in the system the NFPA110 Alarms. The screen also allows manual testing and fault reset of the ATS.

Alarm History Display

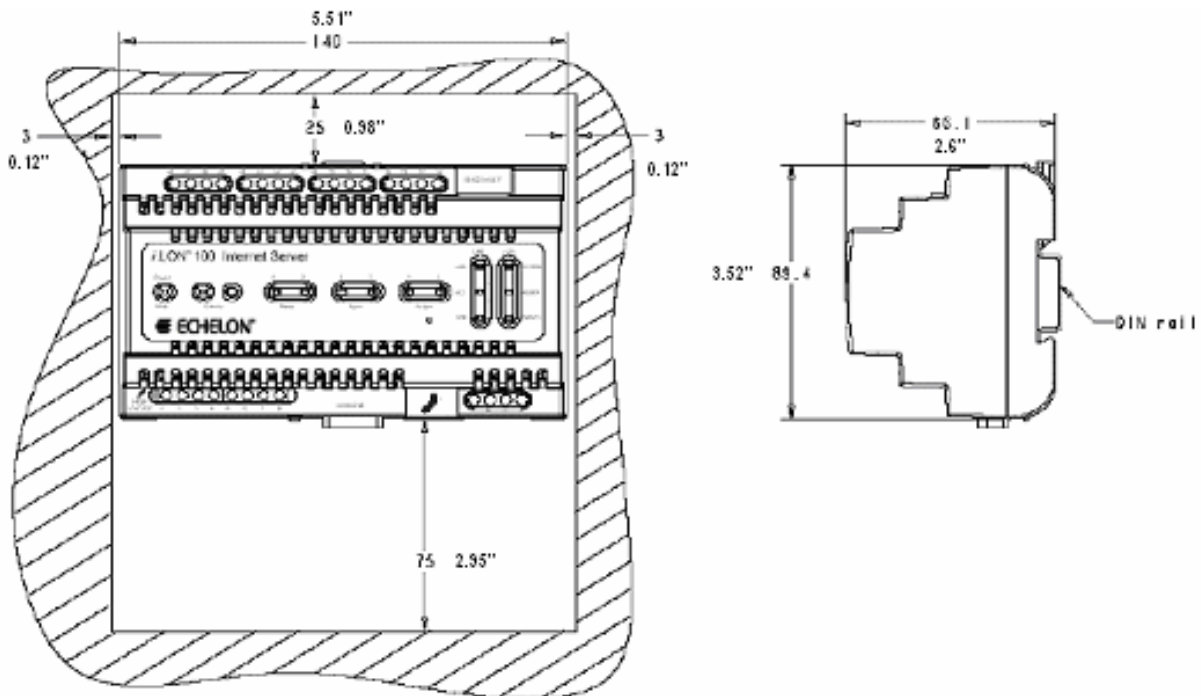


The fault information display provides the user with a date and time-stamped remote indication of alarm conditions that have occurred at a site. The data displayed is the device and output on the network that caused the alarm condition. The display is user configurable to specific dates and data points.

Alarm Summary Display

The Alarm Summary Display allows users to view, acknowledge and clear active alarms. This page can be user defined by date and data point.

Dimensional Data



Units in mm and inches (")

Ordering Info

Model	Description
0541-1302-01	PowerCommand iWatch 100 with Modem
0541-1302-02	PowerCommand iWatch 100 without Modem

Monitoring Equipment Requirements

The PC monitoring the PowerCommand iWatch 100 system must be provided with Microsoft Internet Explorer version 6.0 or later. Any equipment suitable for use with that application is acceptable.

Environment

The PowerCommand iWatch 100 hardware equipment is DIN rail mountable. The equipment is designed for operation in ambient temperatures from 0C to +50C. Required power is 100 to 240 VAC, 50/60 Hz.

Additional Hardware Needed

For Installation and Communication the following additional hardware is required

- DB9 Female to Female Null Cable
- Ethernet Cable (RJ-45 Connectors)
- Power Cord (Dependent on input Voltage)
- Telephone Cord (Modem Models)

See your distributor for more information



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⚠WARNING *For Professional Use Only. Must be installed by a qualified service technician. Improper installation presents hazards of electrical shock and improper operation, resulting in severe personal injury and/or property damage.*

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