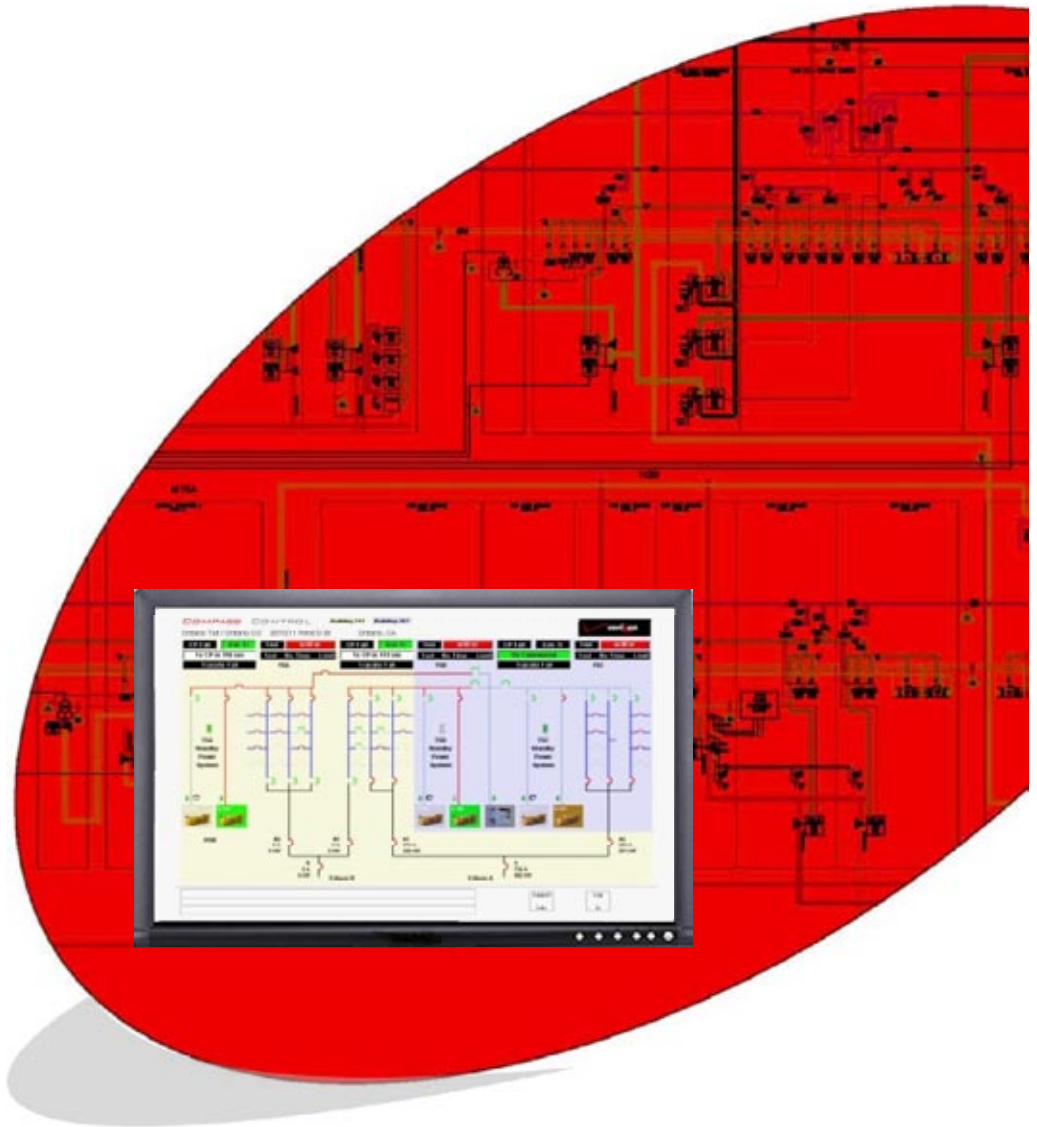


Compass Control™ Monitoring

Distributed Monitoring Platform

A *single monitoring point* for multiple systems and devices



W. A. Benjamin Electric Company
Manufacturers of Quality Electrical Power Distribution Equipment

Compass Control™ Monitoring

Facility Monitoring and Integration Made Easy

Compass Control Monitoring (Compass) is a highly distributed monitoring system that provides the most effective and targeted facility integration platform available today. Immediately one will discover the broad reach Compass has in to diverse systems, equipment and devices. The user interface is easy to navigate with big picture summary status and yet powerful enough to drill down into the latest meter readings, events, trends, alarms or shutdowns. Network adaptability and flexibility to integrate into new and existing devices and monitoring platforms makes Compass the most ideal multi-level monitoring system in the market.



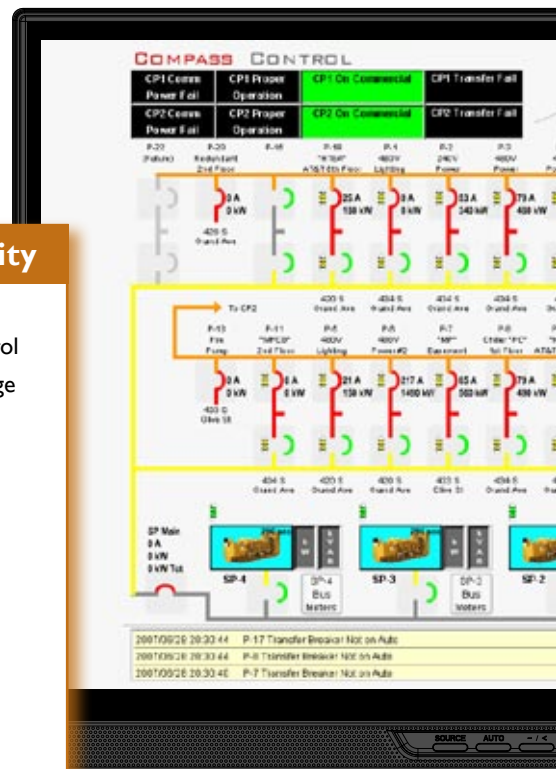
Lighting Control - Power Quality

Benjamin ArcLight™ Panel Interface

- Site or Enterprise Energy Management and Control
- Includes circuit breakers with relays in one package
- Lighting Controls
- Energy Management/Demand Curtailment

Power Quality Analyzer (Coming Soon)

- The latest innovative development for electrical system analysis
- Direct measurement of current and voltage
- Interrogates every point of the electrical system
 - High-speed data capture
 - Synchronized data from all points



Generator Monitoring and Control

Generator Exhaust Monitoring

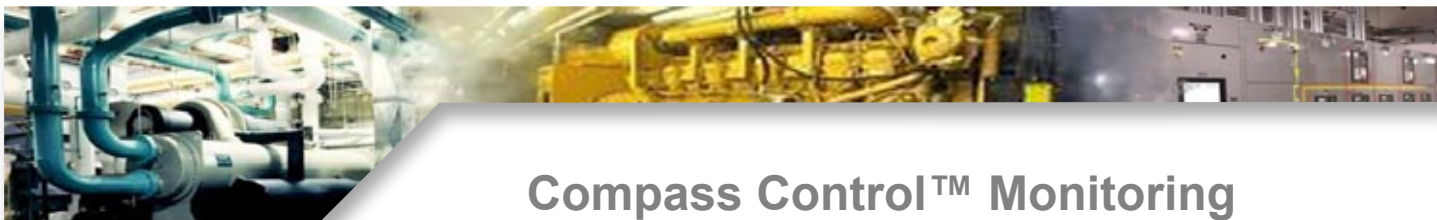
- Air Resources Board Compliant monitoring and data recording
- Over 7 years of engine run data
- Trending and alarming available
- Event and alarm logging and export
- Integrated Load Bank controls
- Generator Parametric Data Export

Generator Monitoring and Controls

- Standby Generator Control
- Paralleling Generator Control
 - Soft Load Transfers/Peak Shaving
- Caterpillar Generators
 - CAT Datalink
 - J1939 CANBUS
 - EMCPIII/III Interfaces
- Cummins, Detroit, Onan, Solar, Kohler

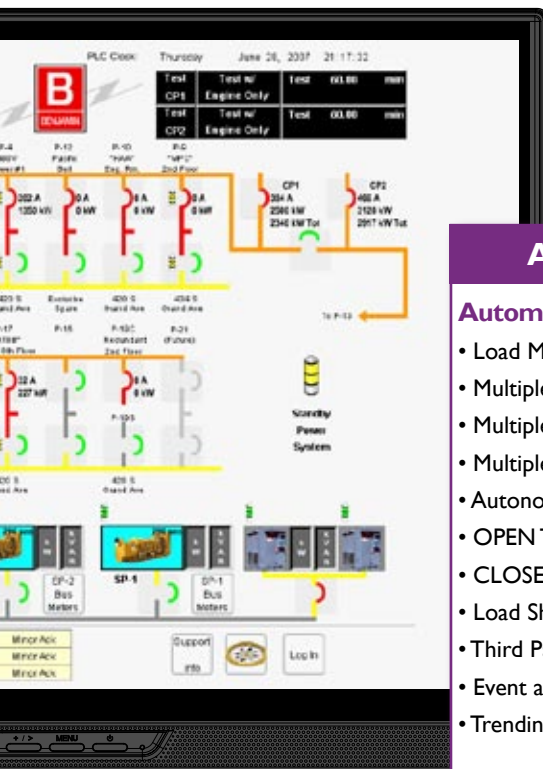
Local Area Network

- Ethernet connection to customer LAN
- Use any browser to view Compass status
- No costly, proprietary software needed
- No licensing
- FIREWALL protected
- Multiple levels of security available
- Meets DOD Security requirements
- Page, Voicemail, email alerts
- Local and Remote Alarming



Compass Control™ Monitoring Focused and Agile

The open architecture and program expandability of Compass requires only one Local Area Network (LAN) connection from the end customer. Therefore, only one IP address is needed to monitor an entire system. Compass Control Monitoring takes advantage of Ethernet Technology to gather data from numerous diverse equipment and devices. Compass Control interfaces with an immense variety of equipment to gather data. From discrete I/O to analog 4 to 20mA signal bus to proprietary serial interfaces and open serial interfaces, Compass Control condenses the data into a single monitoring vantage point. Compass Control provides a uniform platform for everything in your facility.



Automatic Transfer and Switchgear Monitoring and Control

Automatic Transfer Monitoring and Control

- Load Manager Transfer Controls
- Multiple Paralleled Generators
- Multiple Lead/Lag Generators
- Multiple Transfers
- Autonomous-operating Transfers
- OPEN Transition
- CLOSED Transition
- Load Shed/Load Priority
- Third Party Transfer Switch Monitoring
- Event and alarm logging
- Trending and alarming

Switchgear Monitoring and Control

- Arc Flash
- New and existing Switchgear integration
- Load Shed and Load Balancing
- Detailed breaker specific metering and control
- Trending and alarming
- Event and alarm logging and export
- Metering data export
- Motor Control Centers
- Distribution Switchboards
- Dead Front Switchboards
- Panelboards
- Low, Medium and High Voltage

Data Center, Telcom Building, and HVAC Monitoring

Data Center and Infrastructure Monitoring

- UPS systems
- Battery Monitoring
- Static Transfer Switches
- PDU's
- CRAC Units
- Event and alarm logging
- Trending and alarming

Telcom Building Monitoring

- DC Power Plants
- Serial and/or discrete interface
- Multiple levels and multiple plants
- Trending and alarming
- Event and alarm logging
- DC Plant distribution

HVAC Monitoring and Control

- Complete complement of HVAC interface
- Lead lag systems
- Energy savings configurations
- Trending and alarming
- Event and alarm logging and export
- Load data export

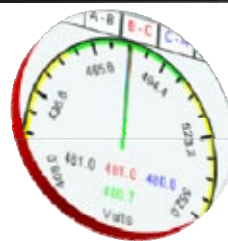
Network Connectivity

LAN
Screens
ded



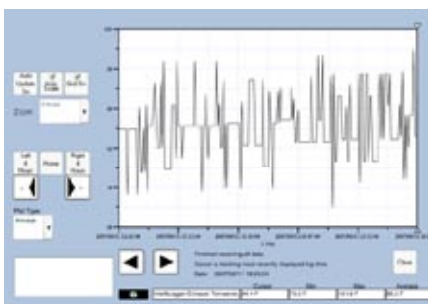
Digital and Analog Meters

- Meters display data with multiple colored needles
- Meter ranges are programmable
- 12 o'clock orientation for immediate feedback



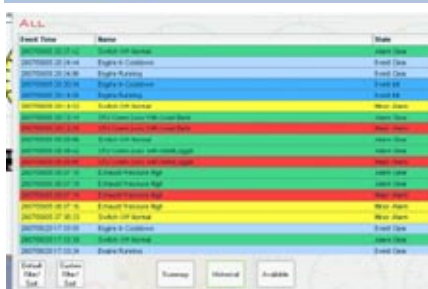
Exhaust Temp

Load Bank controls embedded in Compass allows for simple exhaust temperature control by adding or removing load automatically. Simply input a targeted temperature and let Compass do the rest.



Trending

- Adjustable range
- Zoom In
- Scrolling
- With readouts of displayed:
 - min.
 - max.
 - cursor readouts



Alarm and Event History

All alarms, acknowledged alarms, cleared alarms and events are logged in chronological order. Object specific filters allow for easy alarm or event location. Downloadable spreadsheet for simplified record keeping.

Compass Monitoring™ Generator Exhaust Monitoring

We can connect to an air resource board approved monitoring system and Data Recording. Compass Control Generator Exhaust Monitoring meets air quality standards for record keeping and reporting. With a large and expandable memory capacity for data storage, Compass can keep Generator Run Logs for years. Engine Run Logs for all engine data points are automatically stored for each run, for easy retrieval and download.

With load bank controls already embedded into Compass, the reaching of a critical running exhaust temperature is easy to setup, maintain and monitor. Second by second trending allows for fluid trending graphs and clear trending lines. Compass Control Generator Exhaust Monitoring allows you to:

- Control, Monitor, Log and Download exhaust temperature and pressure.
- Monitor, Log and Download Electrical and Mechanical parameters.
- View Trending plots on critical and non-critical parameters.
- View, acknowledge, reset and download current alarms and alarm history.
- Download Exhaust System, Load Bank and Generator data.
- Summary status Stack-lights for quick referencing

Network connectivity

Network connectivity expands Compass Control's reach with:

- Multiple viewers inside the same Local Area Network
- Single IP address for the entire system
- Firewall protected
- DOD compliant-based network security
- No special licensing and software needed to view
- Expandable to multiple site enterprise monitoring

