# **Global Controls Building Automation Systems**

Controls for the Worldwide Community...











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### **Global Control Solutions Automation Systems**

Global Control Systems, and predecessor Basyx and Facilitec control products have been designed, manufactured and successfully installed in the commercial, industrial and retail markets since 1982.

During that period the controls industry has trended towards sophisticated, complex and expensive software, open protocols and other enhancements which provide marginal functional differences in operation. Control strategies have not changed significantly, with mechanical equipment still cycled or modulated to maintain a desired condition.

Global Controls recognizes the benefits this new technology offers the larger, multi-building or campus installations, and has successfully installed systems which integrate with these open systems. Our primary market is in existing small and medium size facilities which make up 95% of the total building market, and our process allows them to take advantage of these new technologies at a cost-effective level.

Global Controls continues to design and apply systems for retrofit and new construction customers, providing accurate and proven control strategies which provide the highest return on investment and lowest cost of ownership, while insuring a consistent and energy efficient operation of the facility.

A system which presents all the benefits of building automation at a reasonable cost.

Controls for the Worldwide Community...



## **System Applications**

Global Control Systems are designed for commercial, industrial and retail applications. The system uses BACnet protocols and provides the required points for universal control of any HVAC, lighting or mechanical system, and can be used to control minor processes in industrial facilities. The system can be applied to many OEM manufacturers or system integrators equipment for control per their exacting requirements.

- Commercial Facilities
  - Office buildings
  - Educational facilities
  - Industrial Facilities
    - Manufacturing facilities
    - Government facilities

#### Retail Facilities

- Convenience stores
- Restaurants
- Shopping malls
- Stand-alone retailers

#### Mechanical Systems

- Chillers
- Boilers
- Pumping systems
- Rooftop units
- Air handlers
- Water source heat pumps
- Loop Controls
- OEM Applications
  - Custom applications for OEM equipment manufacturer or integrator







# **Control Products**

GCS products are simple to understand, simple to install and simple to service. A full line of products allow control of any type system or equipment. BACnet protocols allow interfacing wide line of manufacturers and systems. We have controllers to be universal in nature, controlling anything from lighting to chillers.

- BACnet Controllers
  - Web-based controllers for system integration
- BASC22 Controller

6 binary outputs / 8 universal Inputs / 4 digital inputs

4 analog outputs

Lighting Board

8 Binary outputs for programmable lighting control

#### Progammable Thermostat

- Full line of BACnet thermostats
- Various input/output configurations
- BACnet MS/TP interface

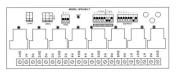
#### VAV Controllers

- Integral actuator and pressure differential sensor
- Floating 3-wire damper output
- Pressure independent control

BASview Graphical Network Module

- Provides custom graphical interface to system
- Allows access to system through standard web browser













### **System Interface**

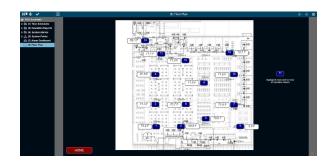
The GCS system is accessed through a standard web browser, and requires no additional software. A complete graphical interface is provided by the NPM-1 module which displays easy to understand graphical views of system settings and operation.

- NPM-1 Graphics Interface
  - Easy to understand status and programming screens
  - Allows schedule, setpoint and other settings through various widgets
  - Equipment views and floor plans showing system status
  - Web-based Interface
    - Connection through any computer or mobile device with internet access
    - Simple screens showing all system operations

#### BACnet Gateway

- Allows connection to existing BACnet equipment and systems
- Supports BACnet IP or BACnet MSTP
  - Integration with competitive systems





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### **System Design Services**

GCS provides all system design documents for field installation personnel. Our experience in HVAC and lighting systems allows us to assist in the design and implementation of control strategies for a multitude of building types and mechanical systems. All design packages include complete installation and termination drawings. Our design services also include specifying and providing all field devices such as sensors, actuators, valves and other system components.

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Design	Assistance	е

- Develop point listing for new and retrofit applications
- Develop control strategies and sequences
- Assist in design and application of mechanical or lighting equipment
- Panel Design
  - Design panels for site specific operation
  - Develop panel assembly drawings
  - Provide complete documentation on internal wiring
- System Components
  - Selection of required field devices
  - Provide all field materials for a complete installation package
  - Single source responsibility for entire system
  - Provide wiring details for all system third party components

#### Installation Assistance

- Telephone assistance for field personnel
- On-site installation assistance and supervision available
- System start-up assistance through modem or internet connection

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### **Panel Assembly Services**

Once the system design is completed, GCS provides assembled panels to our customers, which eliminates the high cost of field assembly and programming by the installing contractor. Panels are job specific, completely wired, programmed and tested to facilitate easy installation and start-up.

- NEMA enclosures for specific applications
- Backplate assemblies for direct switchgear installation
- All control hardware, transformers and power supplies included
  - All I/O points wired to clearly marked terminal strips
    - Complete programming for required system operation
- Factory tested
  - Minimum 24 hour burn-in

