



# 4ManPro

*Elements For Manufacturing Processes*



**PRODUCTOS  
DE CONTROL**





 Delta  
CONTROLS

## **Delta Controls**

Delta Controls is one of the largest manufacturers of building automation controllers, with more than 300 service providers in over 80 countries. For more than three decades, Delta Controls has offered dependable and user-friendly building control solutions for commercial, healthcare, education, leisure buildings and more.

# Contents

## SOFTWARE & TOUCHSCREENS

- Earthright 4**  
ENERGY DASHBOARD
- enteliWEB 4**  
FACILITY & ENERGY MANAGEMENT SOFTWARE
- ORCAview & ORCAweb 5**  
BUILDING AUTOMATION INTERFACE
- Facility Scheduler 5**  
SCHEDULE SPACES & CONTROL COSTS
- enteliTOUCH 5**  
TOUCHSCREEN BUILDING CONTROLLER

## SYSTEM CONTROLLERS

- enteliBUS 6**  
MODULAR CONTROL SYSTEM
- DSC 6**  
DELTA SYSTEM CONTROLLERS

## SYSTEM MANAGERS

- DSM 7**  
BACnet ROUTERS
- Scaleable Power 7**  
SYSTEM MANAGERS AND CONTROLLERS TO HANDLE ANY SIZE PROJECT

## APPLICATION CONTROLLERS

- DAC 8**  
DELTA APPLICATION CONTROLLERS
- DVC 8**  
DELTA VAV CONTROLLERS
- enteliZONE 9**  
CONFIGURABLE OR PROGRAMMABLE

## BACstats

- BACstats 9**  
COMPACT CONTROL

## SENSORS

- eZNS 10**  
NETWORK SENSORS
- Change Color 10**  
WITH THE eZNS RGB BACKLIGHT DISPLAY
- DNS 11**  
DELTA NETWORK SENSORS

## ARCHIVING

- COPPERCUBE 11**  
KEEPING YOUR DATA SAFE

## WIRELESS

- enteliMESH 12**  
ZIGBEE INTEGRATION
- CON-ENOC 12**  
ENOCEAN INTEGRATION

## INTEGRATION

- enteliBRIDGE 13**  
CONNECT YOUR SYSTEMS
- The POWER of Integration 13**  
THE POWER TO CHOOSE...

## ACCESS

- enteliBUS 14**  
ACCESS CONTROL SYSTEM MANAGER
- ADM-2W704 14**  
ACCESS DOOR MANAGER

## LIGHTING

- DLS 15**  
DELTA LIGHTING SYSTEM

## INTERACTIVE ARCHITECTURE

- Interactive Architecture 15**  
MORE INFORMATION, AT YOUR FINGERTIPS

Our software provides intuitive interfaces, remote connectivity and informative displays. Our flagship product, enteliWEB, delivers a single-seat software solution for enterprise facility management. With enteliWEB, you can control multiple system types through one interface.

# SOFTWARE & TOUCHSCREENS



## Earthright ENERGY DASHBOARD

The Earthright Energy Dashboard clearly communicates energy savings within your facility. It shows real-time, year-to-year results, and educates viewers about how facilities are being made more eco-friendly.

Get people within your building involved with your energy conservation efforts.

### KEY FEATURES

**Single installation, multiple viewing platforms**

- Interactive kiosks
- Lobby displays
- Web browsers

**Custom setup**

Show off which green measures are important in your facility. Display conventional utilities such as electricity, water and gas, or customize the display to show utilities such as steam.



LINKS

**EARTHRIGHT ENERGY DASHBOARD DEMO**  
[dashboard.deltacontrols.com/enteliweb/earthright#/campus](http://dashboard.deltacontrols.com/enteliweb/earthright#/campus)

**EARTHRIGHT ENERGY DASHBOARD PRODUCT PAGE**  
[deltacontrols.com/products/energy-management/energy-awareness/earthright-energy-dashboard](http://deltacontrols.com/products/energy-management/energy-awareness/earthright-energy-dashboard)



## enteliWEB FACILITY & ENERGY MANAGEMENT SOFTWARE

enteliWEB is a web-based application that connects all your facilities and centralizes building management operation, site engineering and energy analytics.

View your building your way by creating your own personal dashboards.

### KEY FEATURES

**Energy Analytics**

Get real-time data about energy use within your facility.

**Engineering Tools**

All the tools you need to administrate your building network, with personalized dashboards for every person.

**Centralized Energy Management**

enteliWEB allows you to manage multiple buildings or facilities from one place.

LINKS

**enteliWEB PRODUCT PAGE**  
[deltacontrols.com/products/energy-management/energy-management-software/enteliweb](http://deltacontrols.com/products/energy-management/energy-management-software/enteliweb)

# ORCAview & ORCAweb

## BUILDING AUTOMATION INTERFACE

With ORCAview and ORCAweb you get a lightning-quick engineering tool and web-based building management platform. Create and display custom graphics for your facility to provide an intuitive workflow for your users.

ORCAview PRODUCT PAGE

[deltacontrols.com/products/access-control/user-interfaces/orcaview](http://deltacontrols.com/products/access-control/user-interfaces/orcaview)

ORCAweb PRODUCT PAGE

[deltacontrols.com/products/access-control/user-interfaces/orcaweb](http://deltacontrols.com/products/access-control/user-interfaces/orcaweb)

LINKS



### KEY FEATURES

#### A Powerful Engineering Tool

ORCAview boasts fast and intuitive workflows, allowing you to get more done.

#### Custom Web-Based Graphics

ORCAweb provides a web server and graphics creation package in one.

#### Flexible Software Packages

We have a package to fit every size of installation, from a single, small building to a sprawling multi-building campus.

### KEY FEATURES

#### Tie Building Automation to Occupancy

The Facility Scheduler allows you to sync HVAC, access and lighting to occupancy.

#### Create Savings in Your Building

On-demand control reduces operating costs when spaces aren't occupied.

#### Advanced Scheduling

Take advantage of the built-in calendar for more scheduling options.

# Facility Scheduler

## SCHEDULE SPACES & CONTROL COSTS

Facility scheduler allows you to connect third-party scheduling, booking systems and tenant portals to your building management system. By integrating these systems, you can preserve your existing workflow while gaining all the benefits of a Delta system.



### KEY FEATURES

#### Customized Experience

The enteliTOUCH provides customizable and intuitive graphic navigation of your system.

#### All the Options You Need

The enteliTOUCH comes with a temperature sensor and optional motion and humidity.

#### Flexibility Defined

Add-ons provide web server capabilities or turn the enteliTOUCH into a wireless hub for other devices.

# enteliTOUCH

## TOUCHSCREEN BUILDING CONTROLLER

The enteliTOUCH provides a seven-inch custom interface for your building. Perfect for managing small facilities or providing on-the-spot access for larger facilities, the enteliTOUCH ensures that your staff always have control of your building.



Delta Controls System Controllers provide the power and capabilities to administrate sites, large and small. Our modular enteliBUS controller scales easily to any application size.

# SYSTEM CONTROLLERS

## enteliBUS MODULAR CONTROL SYSTEM

The enteliBUS Control System is a powerful, fully programmable BACnet controller that features modular, expandable I/O. In addition to being a flexible system controller, enteliBUS is also a BACnet router, capable of joining multiple network segments.

### KEY FEATURES

#### Hot Swappable

Modules can be changed out while enteliBUS is powered. Reduce downtime for troubleshooting.

#### HAO Switches

Outputs use manual Hand-Auto-Off switches. You can change from Auto to On or Off without short cycling equipment.



LINKS

enteliBUS PRODUCT PAGE

[deltacontrols.com/products/hvac/central-plant-controllers/entelibus](http://deltacontrols.com/products/hvac/central-plant-controllers/entelibus)



## DSC DELTA SYSTEM CONTROLLERS

DSCs are perfect for controlling critical equipment such as air-handling units or hydronic systems. DSCs provide programming flexibility and include features such as memory backup and a battery-backed real-time clock.

### KEY FEATURES

#### Control your network

The real-time clock and memory backup make the DSC ideal for managing your network or controlling critical equipment.

#### A flexible array of sizes

The DSC comes in an array of sizes. Use it to control small terminal units or to take care of your central plant.

LINKS

DSC PRODUCT PAGE

[deltacontrols.com/products/hvac/general-purpose-programmable-io-controllers/delta-system-controllers-dsc](http://deltacontrols.com/products/hvac/general-purpose-programmable-io-controllers/delta-system-controllers-dsc)

# SYSTEM MANAGERS

There are multiple ways to manage your Delta networks. Use the **enteliTOUCH** for small applications or the **enteliBUS** for larger facilities. But when you need a dedicated system manager, look no further than the **DSM**.

## KEY FEATURES

### Modbus Gateway

The DSM-RTR can be field upgraded or pre-loaded to act as a Modbus gateway.

### From BACnet to Internet

The DSM-RTR allows you to set up WAN Intranets or connect your site to the Internet. Routing tasks are easy to manage, making it simple and efficient to grow your network.

## DSM BACnet ROUTERS

Delta System Managers are native BACnet routers that manage traffic over BACnet/IP and BACnet over Ethernet, or on an RS-485 LAN using the BACnet MS/TP protocol. They form the backbone of your BACnet network, handling all the routing tasks needed for an efficient network.



DSM PRODUCT PAGE

[deltacontrols.com/products/facilities-management/infrastructure/dsm-rtr-router](http://deltacontrols.com/products/facilities-management/infrastructure/dsm-rtr-router)

LINKS

## Scaleable POWER

### SYSTEM MANAGERS AND CONTROLLERS TO HANDLE ANY SIZE PROJECT

Your system needs a real-time clock, advanced networking capabilities and powerful system-wide scheduling capabilities. From our powerful enteliBUS, to small scale DSC controllers, we have the system-level devices to suit your project. If your facility is the biggest building on the block, or just needs to work like it is, we have you covered.

From our programmable DAC family to the flexible enteliZONE controllers with configurable options, the Application Controllers are the workhorses of the Delta family. They come in a variety of sizes to meet any need.

# APPLICATION CONTROLLERS

## DAC

### DELTA APPLICATION CONTROLLERS

DACs are fully programmable, native BACnet controllers that come in a variety of capabilities and I/O configurations to fit the needs of every project. DACs are available in RS-485 or Ethernet, allowing for economical and fast networks at every level of your system.

#### KEY FEATURES

##### Ethernet Capable Models

A variety of DACs are available in Ethernet and PoE. This allows you to take Ethernet to the lowest levels of your network, giving you unprecedented speed and response times.

##### Versatility

DACs are screw or DIN rail mountable. Secure your DAC in seconds.



LINKS

#### DAC PRODUCT PAGE

[deltacontrols.com/products/hvac/general-purpose-programmable-io-controllers/ms-tp-application-controllers-dac](http://deltacontrols.com/products/hvac/general-purpose-programmable-io-controllers/ms-tp-application-controllers-dac)

## DVC

### DELTA VAV CONTROLLERS

Integrated Belimo or Siemens actuators and multiple I/O configurations make tackling VAV projects easy and economical. The DVC line includes Ethernet and PoE options to make your entire network high speed.

#### KEY FEATURES

##### More Options. More Data

Using Ethernet or PoE at every level of your network allows you to get more data out of your system. This makes building analytics more powerful and gets you ready for the IoT networks of the future.

##### Tackle any VAV

DVCs come with multiple actuator options and I/O configurations. They're fully programmable so you can handle any configuration of VAV.



LINKS

#### DVC PRODUCT PAGE

[deltacontrols.com/products/hvac/individual-zone-controllers/programmable](http://deltacontrols.com/products/hvac/individual-zone-controllers/programmable)

#### DVC ETHERNET PRODUCT PAGE

[deltacontrols.com/products/hvac/ethernet-poe/ethernet-vav-controllers-dvc-e](http://deltacontrols.com/products/hvac/ethernet-poe/ethernet-vav-controllers-dvc-e)

## KEY FEATURES

### Configurable and Programmable

enteliZONE controllers can be set up as configurable, programmable or a hybrid of the two. Take advantage of the speed of pre-built algorithms while using custom programming to make diverse applications possible.

### More Control

enteliZONE VAV controllers use universal outputs to give you more flexibility.

enteliZONE fan coil controllers give you the choice between TRIAC outputs and onboard relays, ensuring you can control any fan coil.

# enteliZONE

## CONFIGURABLE OR PROGRAMMABLE

enteliZONE employs diverse configurable algorithms, allowing engineers to save time during configuration. With a flexible I/O count, you can tackle a variety of applications, such as fan coils, VAVs and heat pumps.



enteliZONE PRODUCT PAGE

[deltacontrols.com/products/hvac/individual-zone-controllers/configurable](http://deltacontrols.com/products/hvac/individual-zone-controllers/configurable)

LINKS

# BACstats

BACstats provide economical options for room control. The I/O options and programmability ensure that you'll be able to pair our thermostats with any equipment. We provide intuitive interfaces that give users total control of their space.

## KEY FEATURES

### Multiple Ordering Options

BACstats include an onboard temperature sensor with options for humidity and UL 864 smoke control. The I/O is configured to handle a variety of applications.

### Get Your Equipment Under Control

The DNT and DZNT controllers are purpose-built to handle terminal air equipment. They're an economical option for VAVs and FCUs.

# BACstats

## COMPACT CONTROL

BACstats are programmable, native BACnet controllers with sensors and I/O onboard. Our DNT and DZNT models provide the convenience of a thermostat with the strength of a programmable controller.



BACSTAT PRODUCT PAGE

[deltacontrols.com/products/hvac/individual-zone-controllers/configurable](http://deltacontrols.com/products/hvac/individual-zone-controllers/configurable)

LINKS

Our sensors provide options to help control any room. With CO<sub>2</sub>, humidity and accurate temperature, you'll find what you need to keep your space comfortable and efficient. The eZNS color display changes how sensors communicate their data. You can get critical information about your space from across the room.

# SENSORS



## eZNS NETWORK SENSORS

The eZNS is the network sensor that uses color to communicate. With selectable faceplate colors, customizable button layouts and full programmability, the eZNS is one of the most customizable sensors available. There are many predesigned options available to order, or you can create your own layout.

### KEY FEATURES

#### Communicate in color

Use a red screen to indicate alarms. Use blue to show a unit is in cooling mode. Green can show the eZNS Earthright ECO Mode. Use color to communicate from a distance.

#### Choose or Design Your Own

With so many predesigned options to choose from, it's hard to imagine you'd have need for more, but you can design your own button layout using icons you create.

LINKS

eZNS PRODUCT PAGE

[deltacontrols.com/products/hvac/network-sensors-io-expansion-modules/ezns-t100](http://deltacontrols.com/products/hvac/network-sensors-io-expansion-modules/ezns-t100)

## Change Color

### WITH THE eZNS RGB BACKLIGHT DISPLAY

The tri-color LED display allows you to show a variety of colors in multiple hues and brightness levels. You can set the display to brighten as a hotel guest approaches. At night, in an unfamiliar space, this can help guests find the room controls. You can use color to show surgical staff that an OR is ready to use. You can use color to inform teachers that a silent alarm has been activated in a school. Color allows your building to speak to its occupants.



## KEY FEATURES

### Advanced CO<sub>2</sub>

The DNS uses a dual beam, self-calibrating CO<sub>2</sub> sensor. This means that readings will always be accurate, with no need for pricey yearly calibrations.

### All the Options

- Backlight
- Remote Thermistor
- CO<sub>2</sub>
- Humidity
- Motion
- UL 864

# DNS

## DELTA NETWORK SENSORS

The DNS family comes with multiple sensor options to fit your unique space. Temperature, humidity, motion and CO<sub>2</sub> are all available to make controlling environment and IAQ easy. Help reduce energy consumption by implementing occupancy and CO<sub>2</sub>. Use humidity and temperature readings to maintain the perfect workplace.



**DNS PRODUCT PAGE**

[deltacontrols.com/products/hvac/network-sensors-io-expansion-modules/dns-24](http://deltacontrols.com/products/hvac/network-sensors-io-expansion-modules/dns-24)

**LINKS**

Historical data is the heart of building automation. Use it to make your system more efficient or to troubleshoot issues. Your building data is vital to you. We help keep it safe and accessible with our dedicated data logging software and hardware. The **CopperCube** provides reliable archiving capabilities in a compact form. Secure and easy to use, the CopperCube curates your data safely.

# ARCHIVING

## KEY FEATURES

### External Archiving

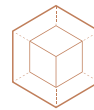
Schedule data backups to occur externally. Keep your data out of harm's way.

### Multi-site

Archive data from multiple sites over WAN Intranet.

### Built-in UI

Configure settings directly in the CopperCube. The embedded UI makes tasks simple and efficient.



# COPPERCUBE

## KEEPING YOUR DATA SAFE

The CopperCube is built solid. The archiving software is housed in an industrial computer. CopperCube uses off-site archiving, automatic backups and IT-friendly design to collect your data and keep it safe.



**COPPERCUBE PRODUCT PAGE**

[deltacontrols.com/products/facilities-management/infrastructure/trend-log-archive-device](http://deltacontrols.com/products/facilities-management/infrastructure/trend-log-archive-device)

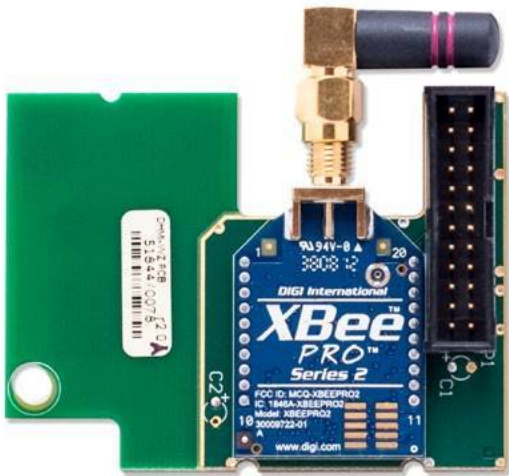
**LINKS**

Our wireless networks work with our Ethernet and RS-485 networks. Use wireless for a quick and economical retrofit or for a simple expansion to your system capabilities. Our CON-ENOC provides access to EnOcean products and peripherals, giving you a range of wireless room solutions.

# WIRELESS

## enteliMESH ZIGBEE INTEGRATION

Use add-ons for the enteliTOUCH, DAC and DSC controllers to turn them into wireless hubs for our ZigBee-enabled products. Using "mesh" network design, the enteliMESH system quickly creates robust wireless networks.



### KEY FEATURES

**The enteliMESH System**  
eTCH-EXP-ZBEE  
DFM-ZBEE  
WNS-T Sensors  
WFM-404  
eM-RPT

### Mesh Stability

The mesh design allows you to extend the range of your network using any powered enteliMESH device. Multiple devices in range of each other create strong interconnected networks.

## CON-ENOC ENOCEAN INTEGRATION

The CON-ENOC creates a dependable gateway for EnOcean wireless devices. Use the CON-ENOC to save money on retrofit and refurbishment projects, or integrate it into your building engineering to add functionality to your system.

### KEY FEATURES

#### More Options. More Data

Each CON-ENOC supports up to 32 devices.

#### Fast Integration

Save device configurations for faster setup or future additions.

#### Quick Installation

Use screw mounts or the secure adhesive mounting pads to make adding a CON-ENOC to your system quick and easy.



LINKS

CON-ENOC PRODUCT PAGE

[deltacontrols.com/products/hvac/network-sensors-io-expansion-modules/con-enoc-enocean](http://deltacontrols.com/products/hvac/network-sensors-io-expansion-modules/con-enoc-enocean)

# INTEGRATION

Whether it's a system expansion or a new system with multiple networks, we believe in the freedom to choose. And we don't think the choice of multiple products should be difficult. That's why we provide options such as the **enteliBRIDGE**. It makes network integration simpler and less costly. It reduces the work of integration by creating an intuitive bridge between systems.

## KEY FEATURES

### Support Your Entire System

The enteliBRIDGE supports up to 10 protocol drivers running simultaneously.

### Streamlined Workflow

We've designed the interface to help save you time when integrating. Laborious tasks such as point mapping are faster with the enteliBRIDGE.

## enteliBRIDGE

### CONNECT YOUR SYSTEMS

The enteliBRIDGE is an integration platform. It simplifies the task of integration with its specialized UI and time-saving workflow features. Embedded on an industrial PC, the enteliBRIDGE makes integration fast, with dependable results.



[enteliBRIDGE PRODUCT PAGE](#)

[deltacontrols.com/products/integration/entelibridge](http://deltacontrols.com/products/integration/entelibridge)

LINKS



## The **POWER** of Integration

THE POWER TO CHOOSE...

Delta Controls has always had the philosophy that you should be able to choose every aspect of your controls system. We give you the ability to do that with our powerful integration technologies. We believe you should be able to choose other controls manufacturers, but we'll give you every reason not to.

Delta provides complete building control. The Delta Controls access system is powerful and versatile. It works as part of a larger system or it can stand alone. The enteliBUS provides fast response times and the ability to add I/O for elevator control.

# ACCESS

## enteliBUS

### ACCESS CONTROL SYSTEM MANAGER

The enteliBUS is an expandable control platform with processing power that makes it a perfect access system manager. You can route door-manager networks directly from the enteliBUS while using I/O modules for elevator control. The enteliBUS does it all for access systems.

#### KEY FEATURES

**Ultra-high User Capacity**

enteliBUS supports up to 50,000 card users.

**Modular Flexibility**

Add elevator button control using I/O directly from enteliBUS. One device does it all.

**The Speed**

With an ARM9 32-bit processor, enteliBUS brings the power to create blazing network speeds.



LINKS

[enteliBUS PRODUCT PAGE](#)

[deltacontrols.com/products/hvac/central-plant-controllers/entelibus](http://deltacontrols.com/products/hvac/central-plant-controllers/entelibus)



## ADM-2W704

### ACCESS DOOR MANAGER

The ADM provides the I/O required to control one bi-directional door or two one-way doors. With two Wiegand ports, the ADM can integrate a variety of card readers and biometric devices. Monitored inputs allow you to provide fault detection for your doors.

#### KEY FEATURES

**Integrated Power**

Internally wired and monitored power is available for each door lock, giving you security in a compact package.

**Reliability**

With power backup and semi-stand-alone capabilities, the ADM can continue to function during adverse conditions.

LINKS

[ADM-2W704 PRODUCT PAGE](#)

[deltacontrols.com/products/access-control/large-scale-applications/adm-2w704](http://deltacontrols.com/products/access-control/large-scale-applications/adm-2w704)

# LIGHTING

The Delta Lighting System provides a seamless way to incorporate lighting into your building control. Reduce your costs on installation and system training by using a unified Delta solution.

## KEY FEATURES

### Flexibility

You can purchase a Delta Lighting Controller alone, or as part of a Delta Lighting System.

### Dependability

The DLS cabinet is assembled in our factory by trained professionals. It reduces setup issues and greatly speeds up installations.

Relays are wired directly into the cabinet, making maintenance and troubleshooting a snap.

## DLS

### DELTA LIGHTING SYSTEM

The DLS incorporates our Delta Lighting Controller with a selection of relays factory installed into a protective cabinet. The DLS can contain modules that add functionality such as a keypad lighting interface or light dimming.



DLS PRODUCT PAGE

[deltacontrols.com/products/lighting-control](http://deltacontrols.com/products/lighting-control)

LINKS

## Interactive Architecture

### MORE INFORMATION, AT YOUR FINGERTIPS

For more detail about any of the products you see here, or to find out how they're applied in a facility, check out the Interactive Architecture at the address below. It's an interactive tour through hospitals, schools and data centers. You'll see the controls world from a whole new perspective.

INTERACTIVE ARCHITECTURE SITE  
[virtualcity.deltacontrols.com](http://virtualcity.deltacontrols.com)

LINKS



**MEXICO BRANCH OFFICE**

Roberto Diaz No. 401  
Ciudad Industrial  
Aguascalientes, Ags.  
México  
20290



**USA BRANCH OFFICE**

**4ManPro®**  
708 Main St.  
10<sup>th</sup> Floor  
Houston, Tx, USA  
77002

[4ManPro@4ManPro.com](mailto:4ManPro@4ManPro.com)  
(449) 171 3420  
[www.4ManPro.com/SPA/](http://www.4ManPro.com/SPA/)

[4ManPro-USA@4ManPro.com](mailto:4ManPro-USA@4ManPro.com)  
+1 (832) 871 5022  
[www.4ManPro.com/ENG/](http://www.4ManPro.com/ENG/)

*Elements For  
Manufacturing Processes*



**DELTA**