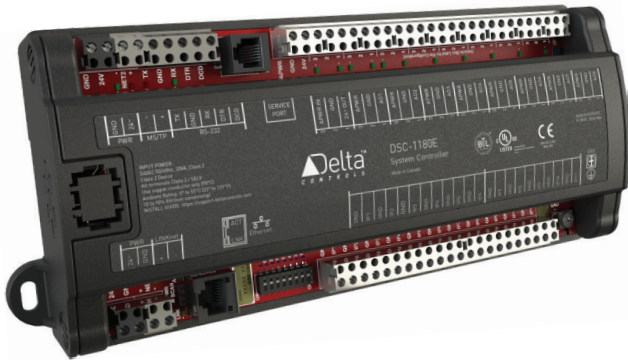


# System Controllers

## DSC-1180E

### Description

The DSC-1180E is a fully programmable, Native BACnet® Building Controller that communicates on Twisted-Pair Ethernet 10-BaseT using BACnet IP and BACnet over Ethernet, or on an RS-485 LAN using the BACnet MS/TP protocol. The DSC-1180E is designed for a wide-range of applications that have medium local I/O requirements. It also supports BACstat® and other Delta LINKnet devices.



### Application

The DSC-1180E is suitable for controlling various packaged units and equipment with medium I/O requirements such as multiple-room reheat valves or small air handling units, boilers and chillers.

The fully programmable DSC-1180E can be tailored to specific applications by creating and modifying BACnet objects and GCL+ programs.

### Features

- ▶ Fully programmable in GCL+
- ▶ Super capacitor for real-time clock and SRAM backup (requires no maintenance)
- ▶ Supports 12 BACstat network sensors on LINKnet for room sensing and control or 2 Delta Field Modules on LINKnet for I/O expansion
- ▶ Actuator power terminal (24 VAC) for each analog output (can be powered internally or from an auxiliary transformer)
- ▶ Firmware upgrade and database load/save over the network
- ▶ Optional field upgrade to Modbus® RTU with hardware key
- ▶ Service port
- ▶ Screw or DIN rail mountable
- ▶ LED indicator for output, power, CPU and SCAN status

### Specifications

#### BACnet Device Profile

BACnet Building Controller (B-BC)

#### Inputs

11 Universal Inputs (10-bit) supporting:  
0-5 VDC  
0-10 VDC  
10 kΩ Thermistor  
Dry Contact (using 10 kΩ Thermistor jumper setting)  
4-20 mA

#### Outputs

8 Analog Outputs (0-10 VDC)

#### Device Addressing

Set via DIP switches and jumper, or software setup

#### Connectors

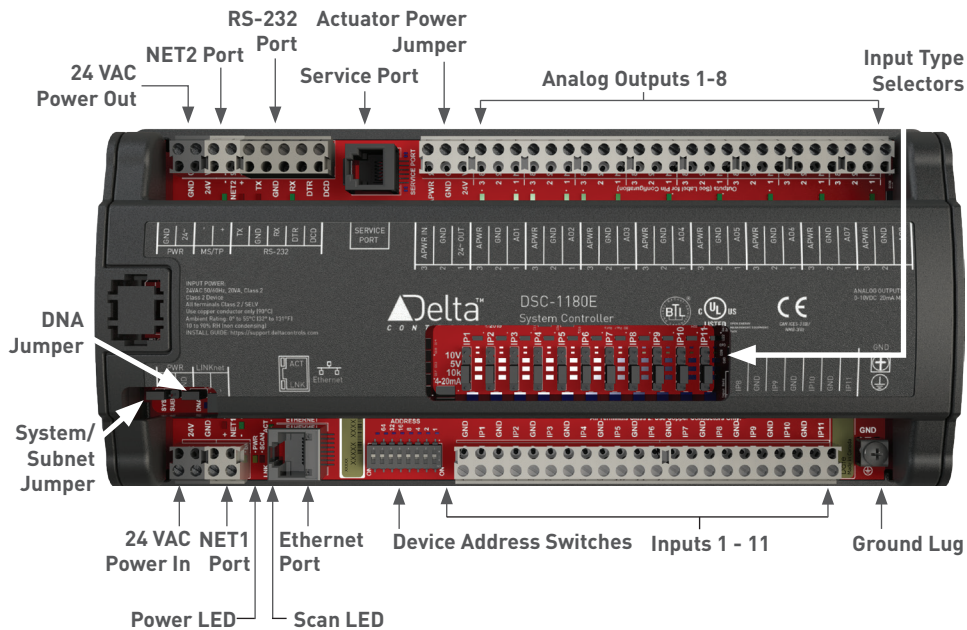
Removable screw-type terminal connectors

#### Wiring Class

Class 2 / SELV

# System Controllers

## DSC-1180E: Board Layout Diagram



### Ordering

Order the DSC-1180E with the desired options according to the following product number:

<b>DSC-1180E</b>	Delta System Controller 11 inputs, 8 analog outputs
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### Accessories

<b>DZNR-768</b>	Delta Network Repeater for BACnet MS/TP
<b>TRM-768</b>	Delta Network Terminator for BACnet MS/TP
<b>CON-768BT</b>	Bluetooth wireless service tool
<b>DFF099-CDT</b>	Additional 50 credit blocks for the Modbus flash key
<b>DFF099-KEY</b>	Modbus flash upgrade key with 50 credits pre-loaded

### Specifications (Continued)

#### Power

24 VAC 50/60 Hz @ 20 VA

#### Technology

16-bit processor  
 2 MB (16-megabit) Flash memory  
 319 KB SRAM memory for database  
 Real-time clock  
 Super capacitor for 72-hr backup of real-time clock and SRAM

#### Communications Ports

Ethernet (10-BaseT)  
 BACnet IP, BACnet over Ethernet

2 RS-485 NET1, NET2 supporting:

BACnet MS/TP up to 76800 bps, max 99 devices per port

Delta LINKnet up to 76800 bps, max 12 devices on LINKnet with no more than 2 DFM devices (1 port only)

Optional Modbus up to 68400 bps, max 5 devices (1 port only)

Serial RS-232

BACnet PTP, up to 38400 bps

#### Ambient

32° to 131°F (0° to 55°C)

10 to 90% RH (non-condensing)

#### Dimensions

10<sup>9</sup>/<sub>16</sub> x 4<sup>1</sup>/<sub>4</sub> x 1<sup>15</sup>/<sub>16</sub> in. (26.2 x 10.7 x 4.9 cm) with housing

#### Weight

0.959 lb. (435 g) with housing

#### Compliance

CE  
 FCC

#### Listings

C-UL Listed  
 UL 916 Listed  
 BTL Listed

BACstat is a registered trademark of Delta Controls Inc.  
 BACnet is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

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Subject to change without notice.