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[GENERAL PURPOSE PROGRAMMABLE I/O CONTROLLERS \(/././GENERAL-PURPOSE-PROGRAMMABLE-IO-CONTROLLERS\)](#) [DELTA SYSTEM CONTROLLERS \(DSC\) \(/./DELTA-SYSTEM-CONTROLLERS-DSC\)](#) > DSC-1616E

## DSC-1616E

The DSC-1616E 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-1616E also supports an additional BACnet MS/TP SubLAN for VAV and other application controllers. The SubLAN may be configured to support Delta BACstats and other Delta LINKnet I/O devices. This controller is designed for a wide-range of applications that have mid-sized I/O requirements.

[Overview](#)[Specification](#)

### Application

The DSC-1616E is suitable for controlling equipment such as AHUs, Boilers, Chillers and a variety of HVAC control systems.

Because of its programming capability, the DSC-1616E can be used to create or modify GCL+ programs and BACnet objects for specific applications.

### Features:

- Native BACnet firmware
- BACnet MS/TP communications
- BACnet IP capability
- BACnet over Ethernet capability
- Integrated housing
- 16 Universal inputs and 16 analog outputs
- Fully programmable in GCL+
- Application database can be flash loaded over the network
- Controller firmware can be flash loaded over the network
- Supports modbus capability by flash loading in the field via hardware key
- Hand/Off/Auto switches with position feedback
- Tri-color LED's to indicate output status

### BACnet Device Profile

BACnet Building Controller (B-BC)

### Inputs

16 Universal inputs - 10 bit (supporting 0-5v, 0-10v, 10k½, 4-20mA)

LED status indication of each input

### Outputs



### Related Products

[DSC-606E \(/products/hvac/general-purpose-programmable-io-controllers/delta-system-controllers-dsc/dsc-product-1\)](#)

[DSC-633E \(/products/hvac/general-purpose-programmable-io-controllers/delta-system-controllers-dsc/dsc-633e\)](#)

[DSC-1146E \(/products/hvac/general-purpose-programmable-io-controllers/delta-system-controllers-dsc/dsc-1146e\)](#)

[DSC-1180E \(/products/hvac/general-purpose-programmable-io-controllers/delta-system-controllers-dsc/dsc-1180e\)](#)

[DSC-1212E \(/products/hvac/general-purpose-programmable-io-controllers/delta-system-controllers-dsc/dsc-1212e\)](#)

[DSC-R1616E \(/products/hvac/general-purpose-programmable-io-controllers/delta-system-controllers-dsc/dsc-r1616e\)](#)

[DSC-R2424E \(/products/hvac/general-purpose-programmable-io-controllers/delta-system-controllers-dsc/dsc-r2424e\)](#)

16 Analog outputs - (0-10v), software configured as binary or analog

LED status indication of each output

#### **Technology**

32-bit processor

2 MB (16 megabit) Flash memory

319 KB SRAM memory for database

Real-time clock with lithium battery & SRAM backup

LED indication of CPU and SCAN status

#### **Device Type**

Configured as either an Area, System or Subnet device

#### **Device Addressing**

Set via DIP switch and jumpers or software setup

#### **Communication Ports**

Twisted-Pair Ethernet (10-BaseT) @ 10 MB (optional), BACnet IP, BACnet over Ethernet

Main LAN (NET1)

BACnet MS/TP @ 9600, 19200, 38400 or 76800 bps (default) (maximum of 99 devices per BACnet MS/TP segment)

SubLAN (NET2)

BACnet MS/TP (maximum 99 devices) or Delta LINKnet @ 76800 bps (maximum 12 devices on LINKnet, with no more than 2 DFM devices)

Serial RS-232 BACnet PTP, 9600, 19200 or 38400 bps

#### **Connectors**

Removable screw-type terminal connectors

#### **Wiring Class**

Class 2

#### **Power**

24 VAC with LED status indication

30 VA

#### **Ambient**

32° to 131°F (0° to 55°C)

10 - 90% RH (non-condensing)

#### **Dimensions**

12 x 8 1/8 x 2 1/2 in. (30.6 x 20.5 x 6.4 cm) with housing

2.20 lb. (1 kg) with housing

#### **Compliance**

CE

FCC

#### **Listings**

UL 916 Listed

BTL Listed

UL 864 Listed (DSC-1616E-UL864 only)

Tags:

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Ethernet System Controllers (DSC-E)