# **Application Controllers**

# DAC-1180 / DAC-1180E

# **Description**

The DAC-1180 is a fully programmable, Native BACnet® Advanced Application Controller that either communicates on Twisted-Pair Ethernet 10-BaseT using BACnet IP and BACnet over Ethernet (DAC-1180E) or an RS-485 LAN using the BACnet MS/TP protocol (DAC-1180). It 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 DAC-1180 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 DAC-1180 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 which requires no maintenance (DAC-1180E)
- Supports 8 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 each output, power, CPU and SCAN status

# **Specifications**

## **BACnet Device Profile**

BACnet Advanced Application Controller [B-AAC]

#### 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 jumpers, or software setup

#### Connectors

Removable screw-type terminal connectors

# Wiring Class Class 2 / SELV

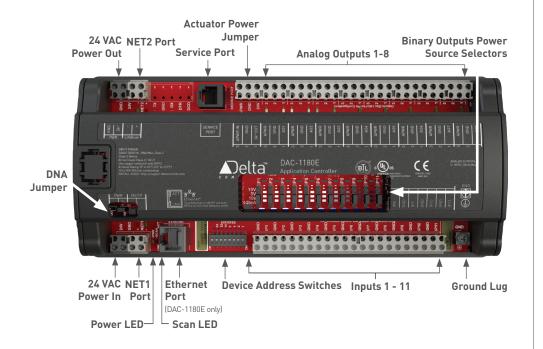
BACstat is a registered trademark of Delta Controls Inc. BACnet is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAF).

Updated May 2016



# **Application Controllers**

# DAC-1180 / DAC-1180E: Board Layout Diagram



# Ordering

Order the DAC-1180 with the desired options according to the following product numbers:

DAC-1180	Delta Application Controller 11 inputs, 8 AOs, MS/TP
DAC-1180E	Delta Application Controller 11 inputs, 8 AOs, Ethernet
	Note: When using Ethernet, MS/TP protocol is not available (RS-485 ports can be used for LINKnet and/or special interfaces only)

# Accessories

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

# **Specifications (Continued)**

#### Powe

24 VAC 50/60 Hz @ 20 VA

# Technology

DAC-1180

16-bit processor1 MB flash memory

127 KB SRAM memory for database

## DAC-1180E

16-bit processor

2 MB flash memory

319 KB SRAM memory for database

Real-time clock

Super Capacitor for 72-hour backup of realtime clock and SRAM

## **Communications Ports**

Main LAN

Ethernet (10-BaseT)

BACnet IP, BACnet over Ethernet

(DAC-1180E only)

or

RS-485 NET1

BACnet MS/TP up to 76800 bps,  $\max$ 

99 devices per port

# ${\sf SubLAN}$

RS-485 NET2

Delta LINKnet up to 76800 bps, max 12 devices on LINKnet with no more

than 2 DFM devices

Optional Modbus up to 38400 bps,

max 5 devices

#### **Ambient**

32° to 131°F (0° to 55°C) 10 to 90% RH (non-condensing)

# **Dimensions**

103/8 x 41/4 x 115/16 in.

 $(26.2 \times 10.7 \times 4.9 \text{ cm})$  with housing

#### Weight

0.944 lb. (428 g) with housing

#### Compliance

CE

FCC

# Listings

C-UL Listed

UL 916 Listed

BTL Listed

Subject to change without notice.

