

Application Controllers

DAC-1146 / DAC-1146E

Description

The DAC-1146 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-1146E) or an RS-485 LAN using the BACnet MS/TP protocol (DAC-1146). 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-1146 is suitable for controlling various packaged units and equipment with medium I/O requirements such as small air handling units, boilers, and chillers.

The fully programmable DAC-1146 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-1146E)
- ▶ Supports 10 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

6 Binary TRIAC Outputs (jumper configured for internal or external power)

4 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

Power

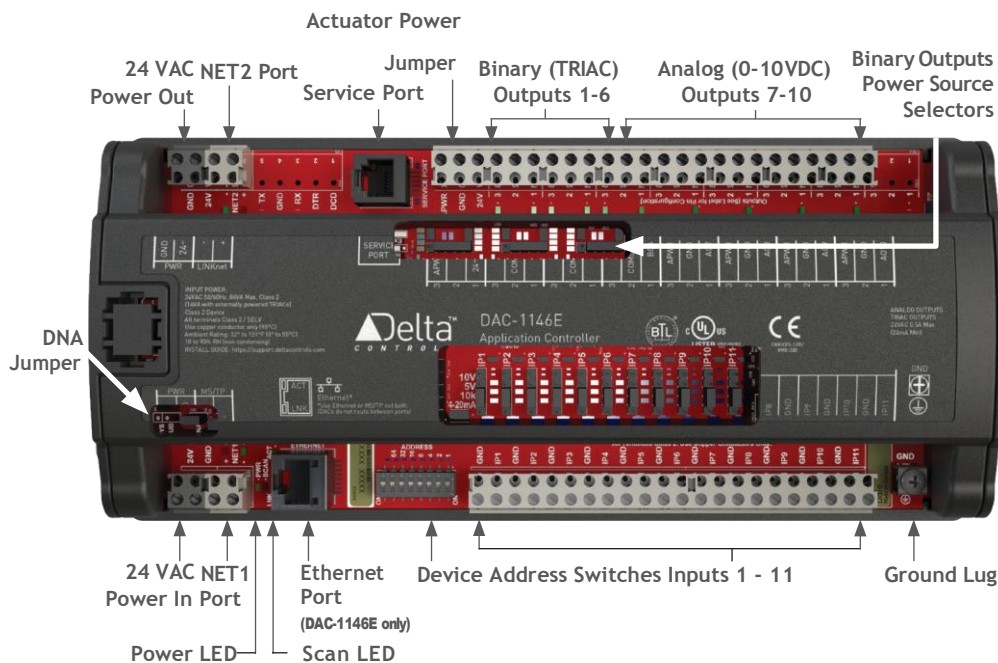
24 VAC 50/60 Hz @ 14 VA, 86 VA with fully-loaded Binary Outputs

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).

Updated May 2016

Application Controllers

DAC-1146 / DAC-1146E: Board Layout Diagram



Ordering

Order the DAC-1146 with the desired options according to the following product numbers:

DAC-1146	Delta Application Controller 11 inputs, 4 AOs, 6 BOs, MS/TP
DAC-1146E	Delta Application Controller 11 inputs, 4 AOs, 6 BOs, 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)

Technology

DAC-1146

- 16-bit processor
- 1 MB flash memory
- 127 KB SRAM memory for database

DAC-1146E

- 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-1146E only)

or

- RS-485 NET1
- BACnet MS/TP up to 76800 bps, max 99 devices per port

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

- 10% x 4 1/4 x 1 15/16 in.
- (26.2 x 10.7 x 4.9 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.