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

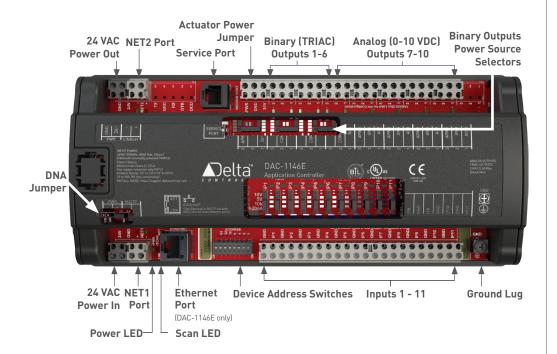
BACstat is a registered trademark of Delta Controls Inc. BACnet is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

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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

${\sf SubLAN}$

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 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.

