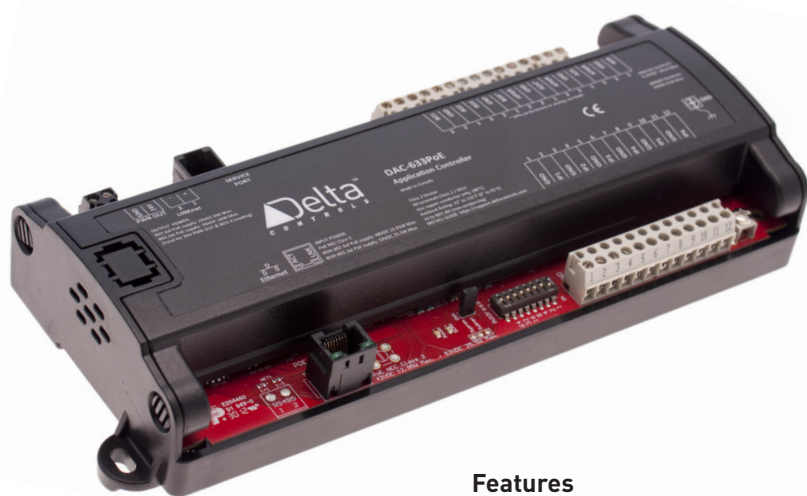# Application Controllers

DAC-633PoE

Description

The DAC-633PoE is a fully programmable, native BACnet® Advanced Application Controller for low density I/0 applications featuring Power over Ethernet (PoE). PoE provides high speed communications and device power in a single cable, simplifying wiring and eliminating the need for a local control transformer.

Application

The DAC-633PoE is suitable for controlling a wide range of equipment with small I/O requirements. It is particularly suited to applications such as fan coils or unit ventilators which often do not have a local step down transformer to provide controller power.

The fully programmable DAC-633PoE can be tailored to specific applications by creating and modifying BACnet objects and GCL+ programs.

Features

▶ Power over Ethernet (PoE)

▶ Local scheduling, trending and alarming functions

▶ Fully programmable

▶ BACnet IP and BACnet over Ethernet Main LAN communications

▶ RS-485 subLAN supports BACstat® smart network sensors, DFM I/O expansion modules or optional Modbus® gateway

▶ Actuator power terminal (24VDC) for each analog output simplifies wiring

▶ Firmware upgrade and database load/save over the network

▶ Service port

▶ Screw or DIN rail mountable

Specifications

BACnet Device Profile
BACnet Advanced Application Controller (B-AAC)

Inputs
6 Universal Inputs (10 bit), jumper configurable for:
   0-5VDC, >1MΩ loading
   0-10VDC, 20KΩ loading
   10 KΩ Thermistor, 10KΩ to 5VDC
   Dry Contact (using 10K jumper setting)
   4-20mA, 250Ω to Gnd

Outputs
2 Analog Outputs
   0-10VDC @ 20mA max per output
   Software configurable as binary or analog

3 Binary FET Outputs
   24VDC
   Internally powered switching to ground

1 Universal Output
    Configurable as either 0-10V or 24VDC FET

LED status indication of each output

Technology
32-bit processor

2 MB (16 megabit) Flash memory

319 KB SRAM memory for database
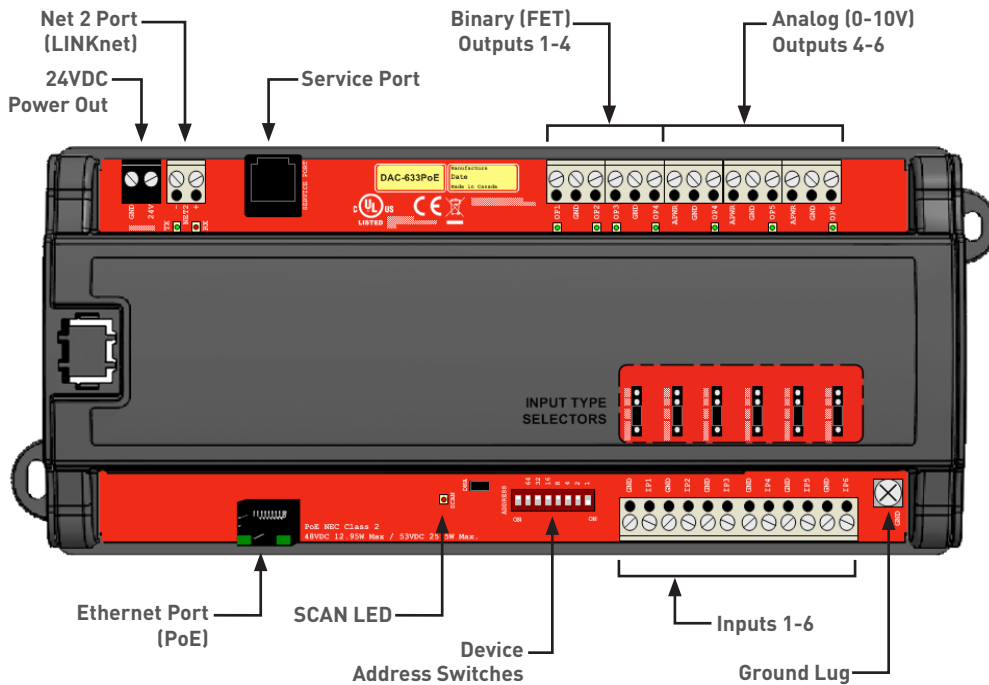
LED indication of CPU and SCAN status

Device Addressing
Software Addressed

Application Controllers

DAC-633PoE: Board Layout Diagrams

Net 2 Port (LINKnet)

24VDC Power Out

Service Port

Binary (FET) Outputs 1-4

Analog (0-10V) Outputs 4-6

INPUT TYPE SELECTORS

Ethernet Port (PoE)

SCAN LED

Device Address Switches

Inputs 1-6

Ground Lug

Ordering

Order the DAC-633PoE according to the following product numbers:

DAC-633PoE	Delta PoE application controller 6 universal inputs, 2 analog outputs, 3 binary outputs, 1 configurable output (0-10VDC analog or 24VDC On/Off)

Accessories

DNS-x24	Delta network sensor with LCD / push-button interface and up to 4 input options (temperature, humidity, CO2 and motion)
CON-ENOC-xxx	Delta EnOcean® Zone Gateway supporting up to 32 EnOcean wireless devices
CON-768BT	Bluetooth wireless service tool

Specifications (Continued)

Communications Ports
Main LAN
Ethernet (10BaseT), BACnet IP and BACnet over Ethernet protocols supported.

SubLAN (NET2)
RS-485 Port (up to 76800 bps) Delta LINKnet, or Modbus RTU protocols supported. (maximum 4 LINKnet devices with no more than 2 DFM devices)

Connectors
Removable screw-type terminal connectors

Wiring Class
NEC Class 2 / SELV

PoE Power In
802.3at PoE: 53VDC, 25.5W max*
802.3af PoE: 48VDC, 12.95W max*
*See installation guide for details on calculating PoE power budget.

24VDC Power Out
802.3at PoE supply: 16W max‡
802.3af PoE supply: 6W max‡

‡Max total power available for external field devices powered from 24VDC out terminal and binary outputs 1 – 4.

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

Dimensions
$10^{5/16}$ x $4^{1/4}$ x $1^{15/16}$in
(26.2 x 10.7 x 4.9 cm)
0.959 lb. (435g)

Compliance
CE, FCC

Listings
C-UL
UL 916
BTL