

Field Control Layer Device

BACnet Advance Application Controller (MSTP)



DACU842BT

【Description】

DACU842BT is a standalone BACnet B-AAC class programmable controller with **365 day clock** and Built in **Touch Screen** (Software configurable). It is designed for monitoring and control of Mechanical Plant. Commissioning is made simple with the onboard **A-O-M override switch's**, the 0-10vdc output has an onboard **POT** for manually driving and testing modulating devices. It uses a 32-bit microprocessor, transmission rate up to 76,800 bps. It has 8 Universal Inputs (AI), 4 Binary Outputs (BO) and 2 Analog Outputs (AO). The **EIM Port** connects up to 12 EIM modules in any combination, allowing you to expand in response to the needs of various points. DAC8846BT conforms and is tested to international BACnet MS/TP communication protocol and fully compatible with any other BACnet system.



【Features】

- BTL listed BACnet Advanced Application Controller (B-AAC) class device.
- 2.8" screen, 65,536 colors, touch screen TFT LCD, 320*240 pixel, set up and edit with AIRTEK BACsoft software.
- MS/TP(Master-Slave/Token-Passing) communication interface, with Peer to Peer function can read and write other DDC's object, may issue a read (DS-RP-A/DS-RPM-A) and write (DS-WP-A) BACnet object properties function.
- EIMnet communication interface can connect up to 12 EIM I/O expansion modules.
- Binary input (BI) has 1,000Vrms optical coupling isolates capabilities and status indication.
- Binary output (BO) has 1,000Vrms optical coupling isolate, status indicators, Triac output, manual on/off/auto three position switch.
- Analog Input (AI) has 16-bit resolution, can be jumper selectable to accept 3K Ω or 10K Ω NTC thermistor, 0~10VDC, and 4~20mA input signals.
- Analog Output (AO) has 16-bit resolution, can be software selected as a 0~10VDC output signal, each point has a manual override/auto output control switch.
- The user's control program can be downloaded, online edited and saved in flash memory of the controller.
- Carry out calculations such as proportional, integral, differential, floating, logic, arithmetic and etc.
- 150 Binary Value (BV) and 150 Analog Value (AV) points, the analog value adopts high precision floating-point calculation.
- Priority control array by 16 for all BO, AO and BV.
- Provide power failure backup functions for all AI/BO/AO/BV/AV values keep in FRAM for at least 10 years.
- Real-time clock, Calendars, Schedules, Notification Class, Event Enrollments standard BACnet object. Schedules and event enrollments support external object access function.
- TFT Touch screen is provided with 10 password levels. User can setup up to 20 passwords.

【Specification】

Model	BI	AI	BO	AO	EIM Q'TY	Calendars	Schedules	Notification	Event	BV Points	AV Points
DACU842BT	0	8	4	2	12	2	12	4	20	150	150

Power Supply : 24VAC, 5VA.

LCD Display : 2.8", 65,536 color, touch TFT LCD320*240 pixels, 32-bit MCU for panel,8M memory for fonts and user data.

Microprocessor : Dual 32-bit MCU for DDC, 128K FRAM, 1M+128K+16K SRAM 及 8M+1M+64K Flash memory.

Binary Input (BI) : 12VDC detection voltage, 1,000VDC optical coupling isolator, accepts dry contact or open collector signal.

Analog Input (AI) : 16-bit resolution, jumper selectable to accept 3K/10K Ω NTC thermistor, 10VDC, or 4~20mA signal.

Binary Output (BO) : 5A/24VAC non-voltage SPST contacts. With manual on / off / auto switch, can monitor the status.

Analog Output (AO) : 16-bit resolution, 0~10VDC.With manual / automatic switch and output signals adjustable Pot.

MS/TP Port : MS/TP MODBUS RS-485, communication speed 9,600/ 19,200/ 38,400/ 76,800 bps, auto select, max. length 1,200 meters, having 2500Vrms optical coupling isolator and TVS ARRAY surge protection.

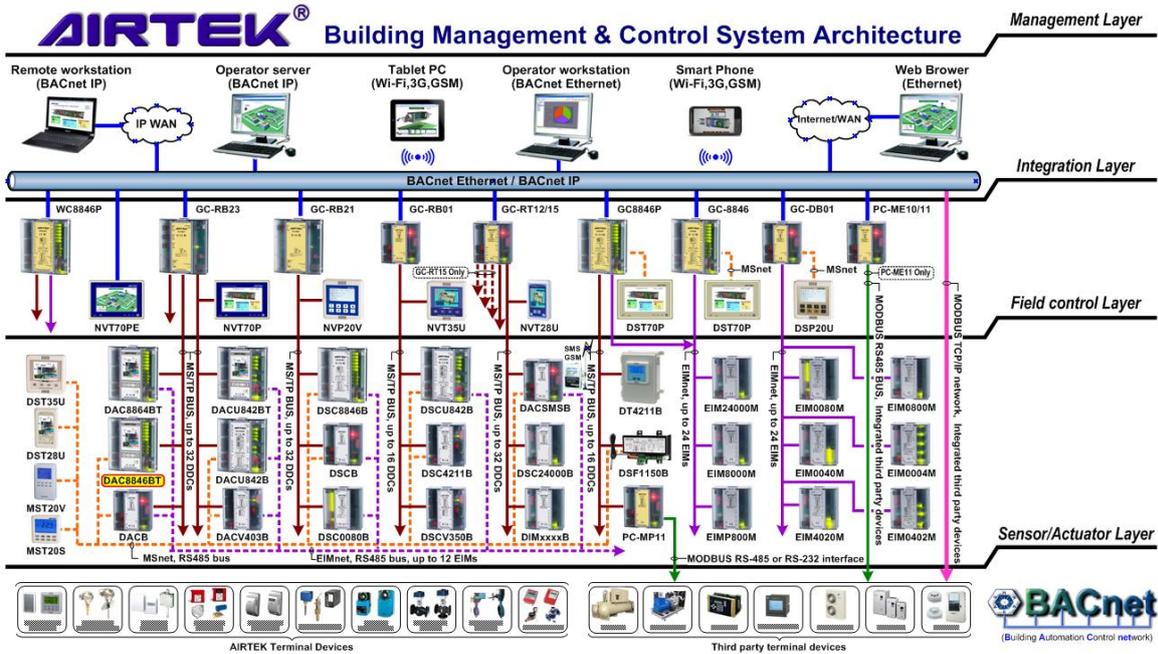
EIMnet Port : MODBUS RTU RS-485, communication speed 38,400 bps, max. length 1,200 meters, up to 12 EIMs.

Real Time Clock : A build-in gold capacitor can back up real time clock after power failure.

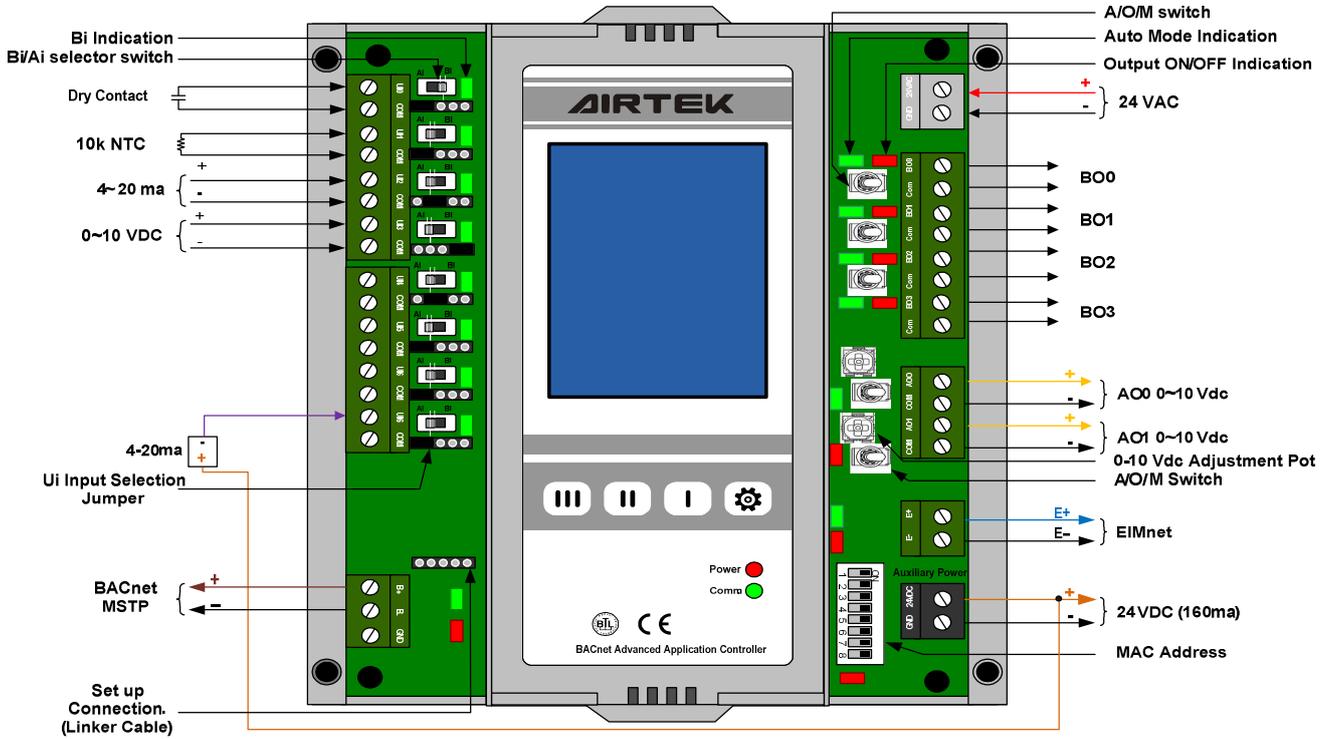
Environment : 0~50 $^{\circ}$ C, 20~90%RH, non-condensing

Certification : CE(EMC Directive 2004/108/EC), FCC(Part 15,Subpart B,Class A), BACnet BTL

[Network Architecture]



[Wiring Diagram]



(Dimension)Unit : mm

