

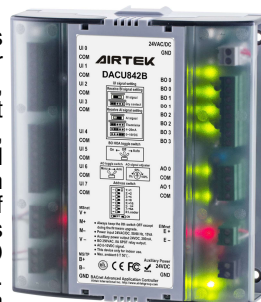
# Field Control Layer Device

## BACnet Advanced Application Controller+Touch panel

# DACU842B

### 【Description】

DACU842B is a BTL listed standalone BACnet B-AAC class programmable controller with an LCD control panel. It is designed for monitor and control building electromechanical device, large AHU, clean room, fume hood, large-scale end device control. It uses 32-bit microprocessor core, communication speed up to 76,800 bps, transmission distance up to 1,200 meters. DACU842B has 8 Universal Inputs (UI), 4 Binary Outputs (BO) and 2 Analog Outputs (AO). In addition, it has an EIMnet port can connect up to 12 EIM series of expansion modules, allowing you to expand in response to the needs of various points. Another MSnet port can connect to an external LCD control panel to make user operation and control easily at the job site. DACU842B conforms to international BACnet MS/TP communication protocol and fully compatible with any BACnet system. It is absolutely the best product for your building.



DACU842B



DACU842B-T

### 【Features】

- It is produced in accordance with the BACnet communication protocol established by the American Heating, Refrigeration and Air-Conditioning Association (ASHRAE), and has passed the BTL B-AAC level certification.
- Built-in 32-bit microprocessor 64K RAM, 32K FRAM and 384K Flash memory.
- Built-in MS/TP master and servant token communication interface, with 2,500Vrms anti-interference potential isolation design, Peer to Peer data transmission and sharing functions, and the ability to read and write external DDC objects. It can read a single pen or Multiple data (DS-RP-A/DS-RPM-A) and the ability to change the value (DS-WP-A).
- Built-in RS-232 communication interface, through the AD-Linker connection line and the hyper terminal machine program, the initial value of the equipment can be set or parameter modification.
- Universal input point (UI), with 12-bit resolution, can accept dry contact, pulse, 3K or 10KΩ NTC thermistor, 0~10VDC or 4~20mA and other signals (note: pulse can accept up to 100HZ on Collector or dry contact signal).
- Digital output point, with 250VAC, 8A, SPST dry contact relay, with 5,000Vrms anti-interference optical coupling isolation device, status indicator light and HOA (manual/stop/automatic) switch with switching status feedback Monitoring function.
- Analog output point (AO), with 12-bit resolution, 0~10VDC output signal, with HA (manual/automatic) switch and with switching status feedback monitoring function and manual signal output adjustment knob to facilitate on-site test run Adjustment and maintenance work is carried out.
- With online program editing, debugging, online program download and online firmware update functions.
- It has common function calculation functions such as enthalpy value, dew point temperature, PID control, and advanced mathematical function calculation functions such as logarithm, trigonometric function, and root sign.
- With BACnet standard objects such as Calendar, Schedule, Notification Class, Event enrollment, etc.; Timetable and alarm event registration support external object access functions.
- It has 150 digital software points (BV) and 150 analog software points (AV), which can be used as calculation values, set points, timers or warning points, etc.
- All analog input cumulative value (AI), digital output value (BO), analog output value (AO), digital software point (BV), analog software point (AV) all have power-off memory function, which can be automatically when power is off Data can be stored in FRAM for more than 10 years.
- All BO, AO and BV points support 16-bit priority control function.

### 【Specification】

Model	UI	BO	AO	EIM Q'TY	Calendars	Schedules	Notification	Event	BV Points	AV Points	Touch Panel
DACU842B	8	4	2	12	2	12	4	20	150	150	X
DACU842B-T	8	4	2	12	2	12	4	20	150	150	V

**Power Supply:** 24VAC, 15VA.

**Microprocessor:** 32-bit high performance MCU, 64K RAM, 32K FRAM and 384K Flash memory.

**Universal Input (UI):** 12-bit resolution, accept dry contact, pulse, 3K or 10KΩ NTC thermistor, 0~10VDC, 4~20mA signal. Pulse signal to accept the largest 100HZ open collector or dry contact input.

**Binary Output (BO):** 8A/250VAC non-voltage SPST contacts, attached manual on / off / auto three sections select switch.

**Analog Output (AO):** 12-bit resolution, 0~10VDC output, attached a manual override/auto output control switch.

**Auxiliary Power:** Provide 24VDC/160mA power supply for external transmitter.

**MS/TP Port:** MS/TP MODBUS RS-485, communication rate 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.

**MSnet Port:** MODBUS RTU RS-485, communication speed 9,600/ 19,200/ 38,400 BPS, can connect a control panel or a MODBUS RTU master or slave device, max. length 1,200 meters.

**EIM Port:** MODBUS RTU RS-485, communication rate 38,400 BPS, max. length 1,200 meters, up to 12 EIMs.

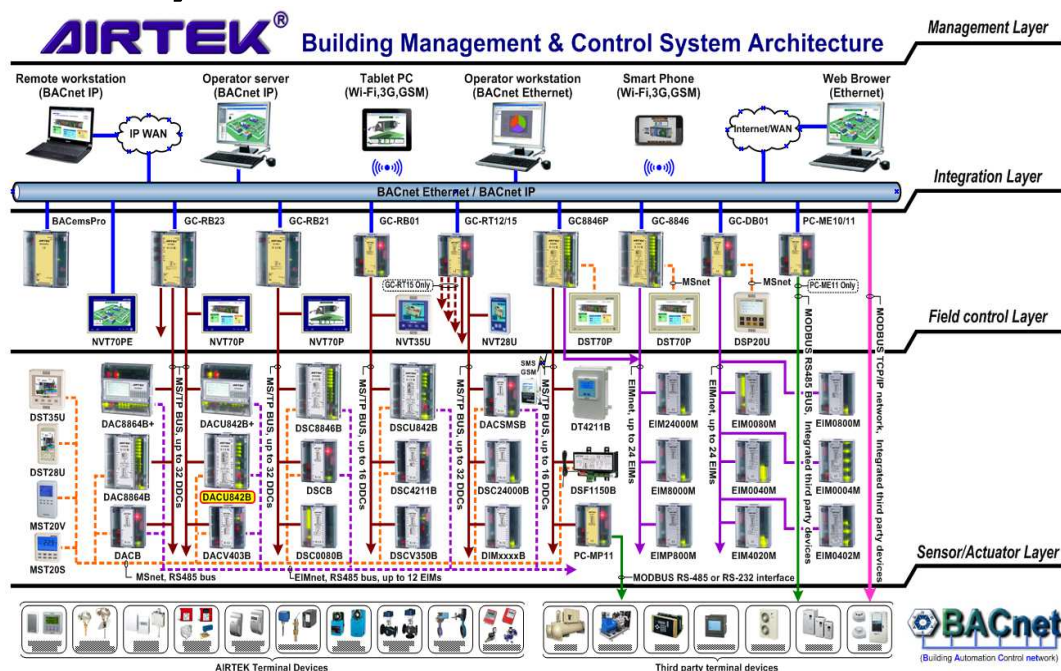
**Auxiliary Power:** 24VDC, 200mA, for sensor use.

**Realtime Clock:** Gold capacitor uninterrupted power backup design keeps clock running after a power failure.

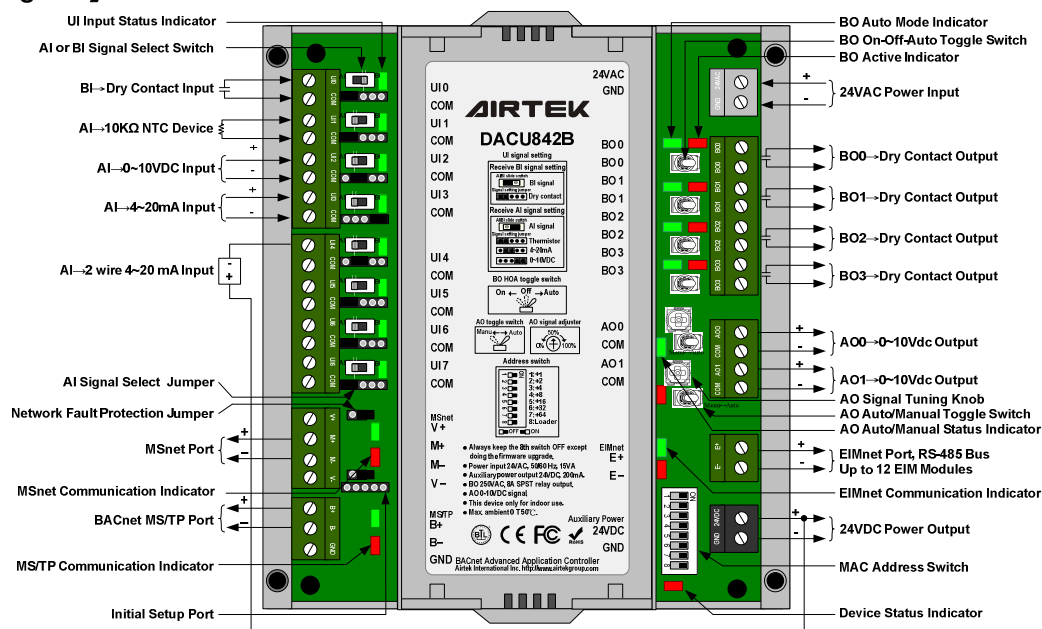
**Environment:** 0~50℃, 5~95%RH, non-condensing.

**Certification:** CE, FCC, BTL(B-AAC), RoHS.

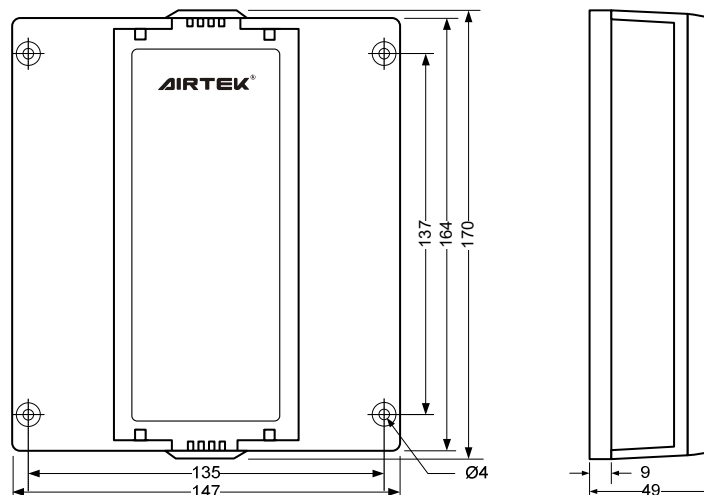
### 【 Network Architecture 】



### 【 Wiring Diagram 】



**【 Dimension 】** Unit : mm



Please refer to <https://www.airtekgroup.com/> for the most recent update information.