

BACnet Field Control Device

BACnet Advanced Application Controller

DACU842B

【Description】

DACU842B is a standalone BACnet B-AAC class programmable controller with a 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, transmission rate up to 76,800 bps, transmission distance up to 1,200 meter. DACU842B has 8 Universal Inputs(UI), 4 Binary Outputs(BO) and 2 Analog Outputs(AO). In addition it also has EIMnet port can connect four EIM series of expansion modules, allowing you to expand in response to needs of various points. Another MSnet port can connect a external LCD screen control panel, for field engineer easy operation and access. 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.



【Features】

- Conforms to ASHRAE and ISO16484-1 defined BACnet AAC standard communication protocol, compatible with BACnet system.
- With an MS / TP (Master-Slave / Token-Passing) port, uses Peer-to-Peer Master Slave/Token Passing communication mode.
- With a MSnet port can connect MST20V, MST20S, DSP20U control panel or MODBUS Master or Slave devices.
- With a EIM port can connect up to 4 EIM I/O expansion modules.
- Universal Input (BI) has 12-bit resolution, accept dry contact, pulse, 3K or 10KΩ NTC thermistor, 4 ~ 20mA or 0 ~ 10VDC signal.
- Binary Output (BO) has a 1,000 VDC optical coupling isolation, 8A/250VAC/SPST relay (Relay), Status Indicator design. Each point has a manual on / off / auto three sections selector switch.
- Analog Output (AO) has 12-bit resolution, can be selected by DIP switch or Internal parameters as 0 ~ 10VDC / 2 ~ 10VDC or 0 ~ 20mA / 4 ~ 20mA output signal, each point has a manual override/auto output control switch.
- User's control program can be downloaded, 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 function for all AI/BO/AO/BV/AV values keep in FRAM for at least 10 years.
- Real-time clock, 2 Calendars, 12 Schedules, 4 Notification Class, 20 Event Enrollments standard BACnet object. Schedules and event enrollments support external object access function.

【Specification】

Model	UI	BO	AO	EIM QTY	Calendars	Schedules	Notification Class	Event Enrollments	Binary Value(BV)	Analog Value(AV)
DACU842B	8	4	2	4	2	12	4	20	150	150

Power Supply : 24VAC/VDC, 5VA.

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, 4 ~ 20mA or 0 ~ 10VDC.
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 selector switch.

Analog Output (AO) : 12-bit resolution, dip switch selection for 4~20mA or 0~10VDC output, attached a manual override/auto output control switch convenient for on-site test work.

Auxiliary Power : Provide 24VDC/160mA power supply for sensor.

MS/TP Port : Two-wire RS-485 network transmission rate 9,600 / 19,200 / 38,400 / 76,800 bps automatic adjustment.

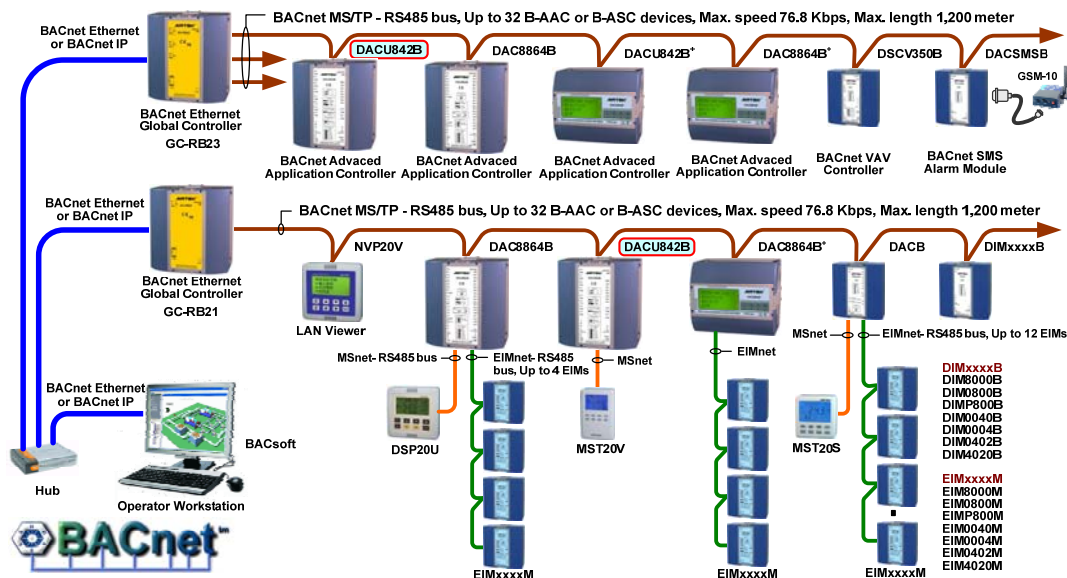
MSnet Port : A MODBUS RTU RS-485 network transmission rate 9,600 / 19,200 / 38,400 bps adjustable, can connect MST20V, MST20S, DSP20U control panel or MODBUS Master or Slave devices.

EIM Port : A AIRTEK RS-485 network, transmission rate 38,400 bps, can connect 4 EIM I/O expansion modules.

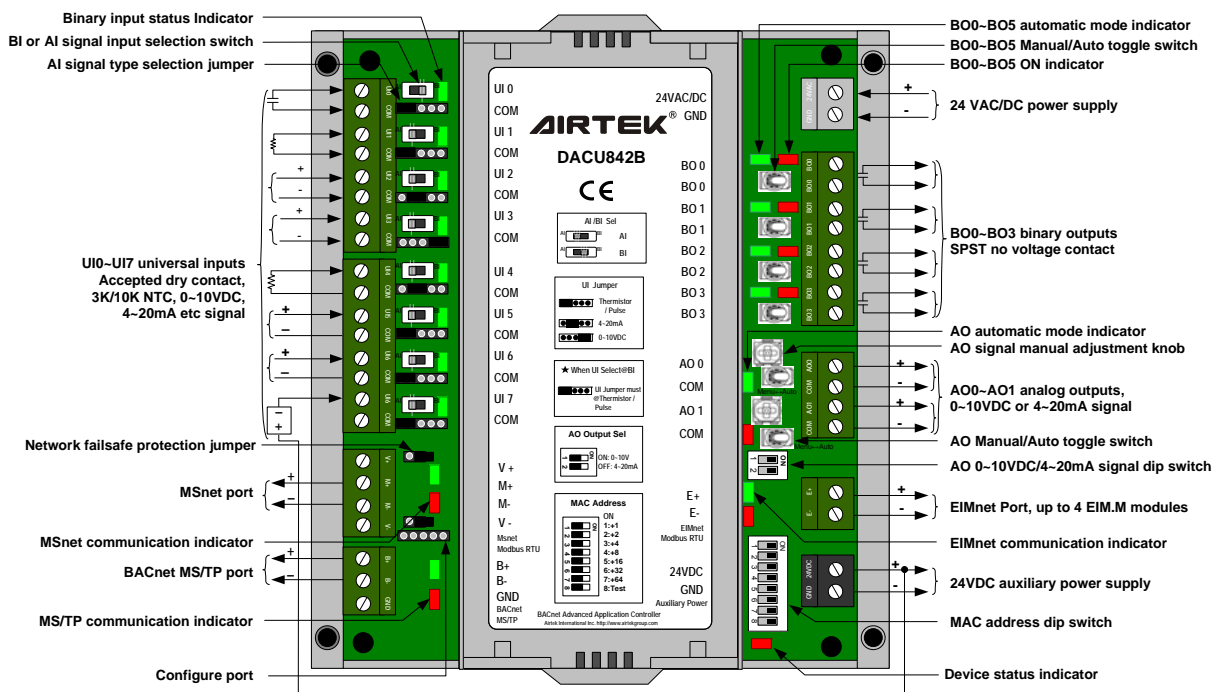
Environment : 0~70℃, 0~95%RH, non-condensing

Certification : EMC Directive 89/336/EEC (European CE Mark).

【Network】

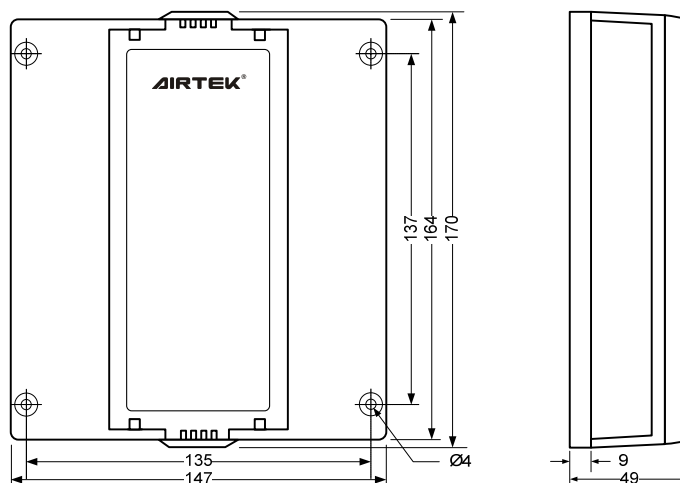


【Wiring】



Note : 1. All GND and COM are connected together EXCEPT the GND of BACnet MS/TP.
2. Select a proper I/O signal type for UI and AO.
3. Calculate the total power consumption and provides enough power supply when DAC and EIM use the same power source.

【Dimension】 Unit : mm



Please refer to <http://www.airtek.com.au> for the most recent updated information.