

# BACnet Field Control Device

## BACnet Advanced Application Controller (MSTP)



# DAC8864B

### 【Description】

DAC8864B is a standalone BACnet B-AAC class programmable controller with 365 day clock. It is designed for monitoring and control of Mechanical Plant such as, large AHU, clean room, fume hood, chillers, pumps etc. 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, transmission distance up to 1,200 meter. It has 8 Binary Inputs(BI), 8 Universal Inputs(AI), 6 Binary Outputs (BO) and 4 Analog Outputs(AO). In addition it has a Modbus RTU Port (Master or Slave) or set it to View Mode and now it can be used for Dedicated input devices such as LCD wall Panels and Touch Screens ect. The EIM Port connects up to 12 EIM modules in any combination, allowing you to expand in response to the needs of various points. DAC8864B conforms and is tested to international BACnet MS/TP communication protocol and fully compatible with any other BACnet system.



### 【Features】

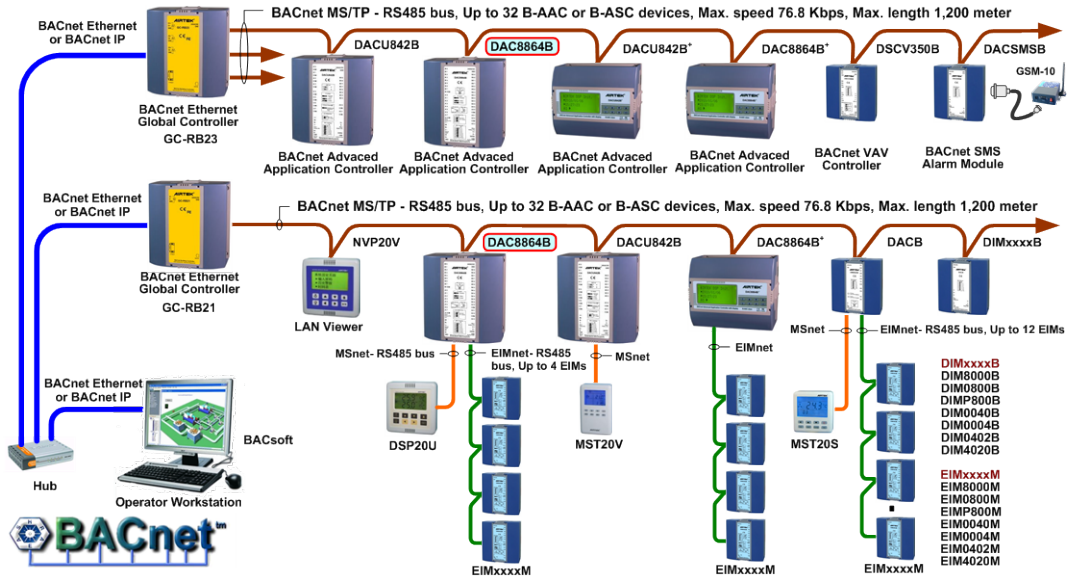
- Conforms to ASHRAE and ISO16484-1 defined BACnet AAC standard communication protocol, compatible with BACnet system.
- A MS/TP(Master-Slave/Token-Passing) communication interface, with Peer to Peer function can read and write other DDC's object, may issue a read (DS-RP-A/DS-RPM-A) and write (DS-WP-A) BACnet object properties function.
- A MSnet communication interface can connect a MST20V, MST20S, DSP20U, MVT32U control panel or a MODBUS RTU Master or Slave device.
- A EIMnet communication interface can connect 12 x EIM I/O expansion modules.
- Binary input (BI) has 1000Vdc optical coupling isolation capabilities and status indicator design.
- Binary output (BO) has 1,000Vdc optical coupling isolation, status indicators and manual on / off / auto three position select switch.
- Analog Input (AI) has 12-bit resolution, jumper selectable to accept 3K,10KΩ NTC thermistor, dry contact, 0~20mA, 4~20mA, 0~5VDC, 0~10VDC, or Pulse inputs.
- Analog Output (AO) has 12-bit resolution, can be selected by Internal parameters as 0 ~ 10VDC or 2 ~ 10VDC output signal, each point has an override/auto output switch and pot for manual or Auto control.
- User's control program can be downloaded, edited and saved in flash memory of the controller.
- Performs 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.
- Provides power failure backup function for all AI/BO/AO/BV/AV values and stores 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】

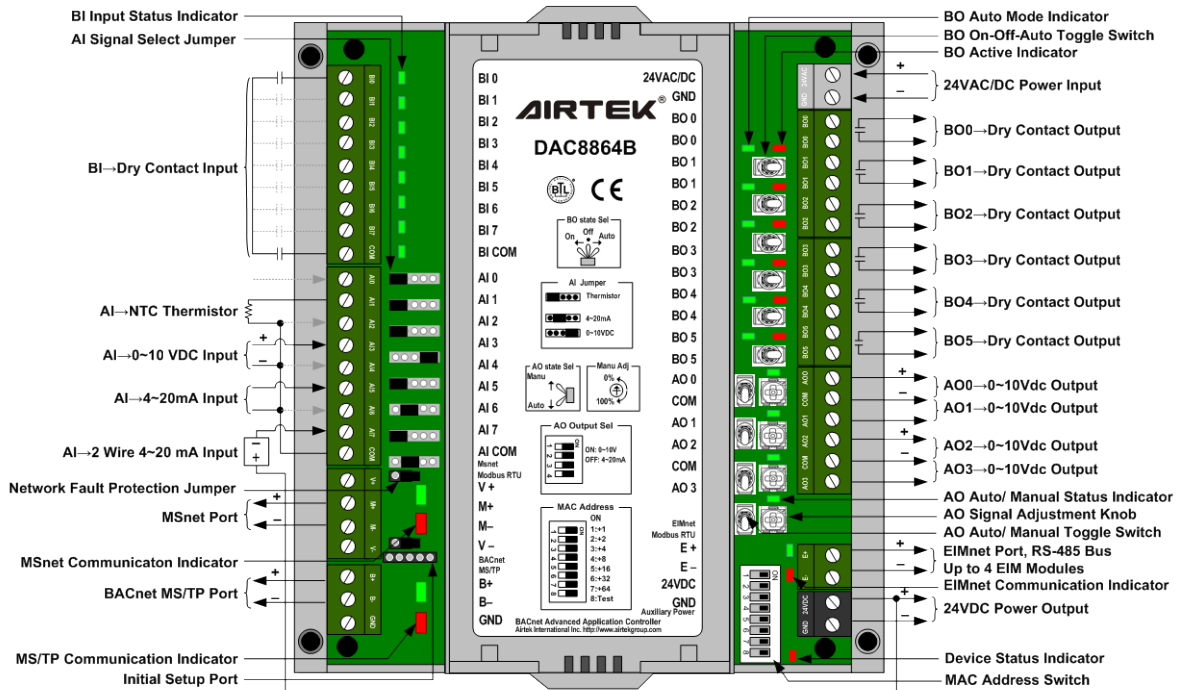
Model	BI	AI	BO	AO	EIM	Calendars	Schedules	Notification	Event	BV Points	AV Points
DAC8864B	8	8	6	4	4	2	12	4	20	150	150

- Power Supply** : 24VAC/VDC, 5VA.
- Microprocessor** : 32-bit high performance MCU, 64K RAM, 32K FRAM and 384K Flash memory.
- Binary Input (BI)** : 12VDC detection voltage, 1,000 Vdc isolation optical coupling, accept dry contact or open collector signal.
- Analog Input (AI)** : 12-bit resolution, jumper selectable to accept 3K or 10KΩ NTC thermistor, dry contact, 4~20mA or 0~10VDC.
- Binary Output (BO)** : 5A/250VAC dry contact SPST contacts, attached manual On-Off-Auto three sections position 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 commissioning.
- Auxiliary Power** : Provide 24VDC/160mA power supply for sensor.
- MS/TP Port** : MS/TP RS-485 bus, communication speed 9,600 / 19,200 / 38,400 / 76,800 bps, automatic adjustment.
- MSnet Port** : MODBUS RTU RS-485 bus, communication speed 9,600 / 19,200 / 38,400 bps adjustable, can connect MST20V, MST20S, DSP20U control panel or MODBUS Master or Slave devices.
- EIM Port** : AIRTEK RS-485 bus, communication speed 38,400 bps, can connect 12 EIM I/O expansion modules.
- Environment** : 0~70°C, 0~95%RH, non-condensing
- Certification** : EMC Directive 89/336/EEC (European CE Mark). UL E363354.

**[Network]**



**[Wiring]**



- Note :
- Besides the BACnet MS/TP GND, all other GND and COM are inner connected together.
  - Make sure to select correct signal type for AI and AO.
  - Make sure there is enough power supply when DAC work with EIMs.

**[Dimension]** Unit : mm

