

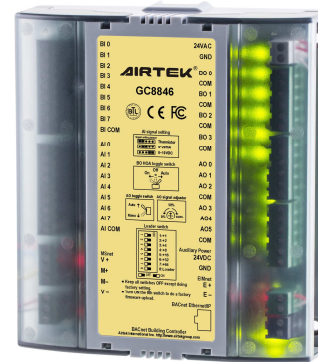
# Integration Layer Device

## BACnet Building Controller

# GC8846

### 【 Description 】

GC8846 is a BACnet B-BC class listed stand alone controller with router function. It has the router, programmable, stand alone functions. Support calendar, schedule, notification, event, trendlog. Apply to facilities of a building. It has a 32 bit microprocessor, digital and analog hardware I/O points. Its EIMnet port can connect 24 EIM I/O extension modules. Its MSnet port can connect to a control panel. This panel will be a convenient of control and monitor at the working site. It works with any BACnet listed device.



### 【 Features 】

- BACnet Building Controller (B-BC) class listed device.
- Compliance BACnet Ethernet and BACnet/IP communication standards as a router.
- A 100M Ethernet port can select either BACnet Ethernet (ISO-8802-2) or the BACnet/IP communication protocol.
- A RS-232 initial setup port specializes for the device parameters modify usage. The default value of this device can be modified by using null modem or AD-linker tool and the Hyper Terminal in the Microsoft Windows system.
- BI is 1000VDC optical couple isolate protection. Has a status indicator LED.
- 16 bit AI, jumper selectable 3K or 10KΩ NTC thermistor, 4~20mA, or 0~10VDC input signal.
- DO is 1000VDC optical couple isolate protection. Has a status indicator LED. Triac output. Each DO has a Manual/Stop/Auto switch. When the switch turns Manual, its status can feed back to the system management software.
- 16 bit AO, 0~10VDC output signal. Each AO has a Manual/Auto knob. When the switch turns Manual, its status can feed back to the system management software.
- On-line firmware update, DDC program edited, downloaded the logic program as well as real-time program debugging function, significantly reducing the program logic the editor time.
- Real-time clock, Calendars, Schedules, Notification Class, Event Enrollments, Trendlogs standard BACnet object. Schedules and event enrollments support external object access function.
- Build in 1,000 Binary Value (BV) and 1,000 Analog Value (AV) points, These BV have 16 level priority array.
- Manage web pages and monitor control points through internet.

### 【 Specification 】

Model	BI	AI	BO	AO	EIM QTY	Calendars	Schedules	Notification	Event	Trendlogs
GC8846	8	8	4	6	24	10	100	10	100	100

**Power Supply** : 24VAC, 35VA.

**Microprocessor** : Dual 32-bit high performance MCU, 1M+128+16K SRAM, 128K FRAM and 8M+1M+64K Flash memory.

**Binary Input (BI)** : 12VDC detection voltage, 5,000Vrms optical coupling isolator, accept dry contact or open collector signal.

**Analog Input (AI)** : 16-bit resolution, jumper selectable to accept 3KΩ or 10KΩ NTC thermistor, 0~10VDC, 4~20mA input signal.

**Binary Output (BO)** : Hot-switched triacs outputs, with 24 VAC, 0.5A rated which have a common connection to the 24Vac supply., attached manual on / off / auto three sections selector switch.

**Analog Output (AO)** : 16-bit resolution, 0~10VDC output, attached a manual override/auto output control switch.

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

**Ethernet Port** : 10/100M Ethernet port with BACnet Ethernet(ISO-8802-3) or BACnet IP communication protocol.

**MSnet Port** : MODBUS RTU RS-485 port, communication speed 9,600/19,200/38,400bps bps selectable, connect to MST..., DSP..., or DST...control panel, or a MODBUS master or slave device.

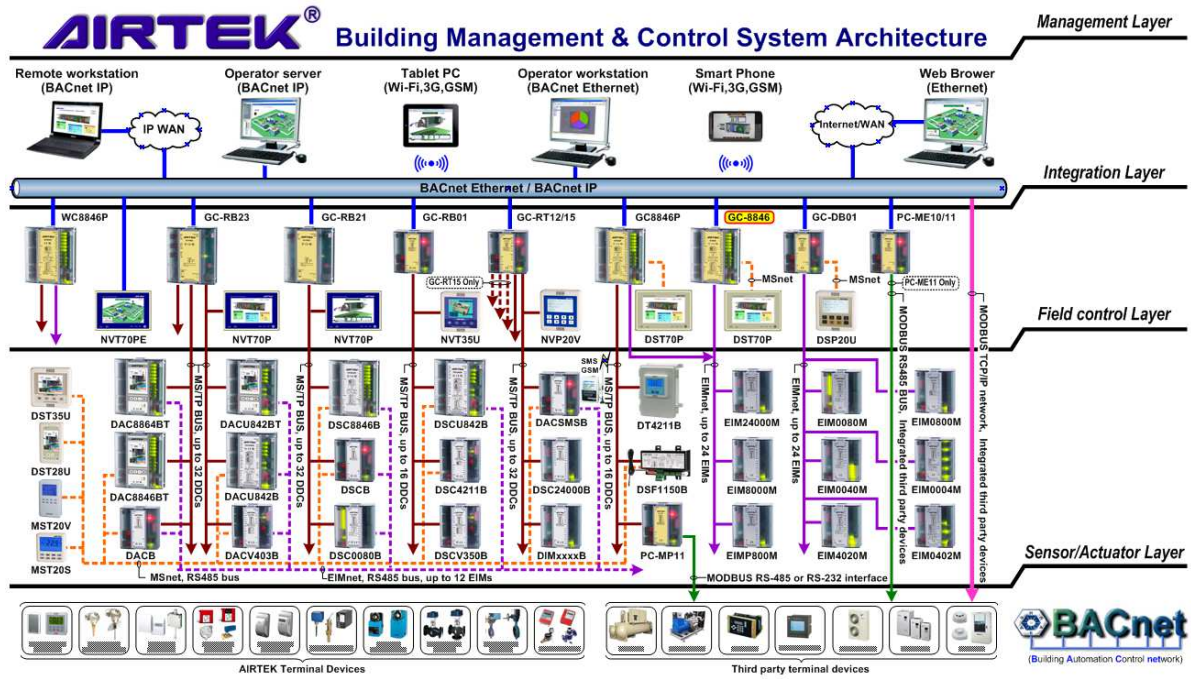
**EIMnet Port** : MODBUS RTU RS-485 bus, communication speed 38,400 bps, max. distance 1,200 meters, up to 24 EIMs.

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

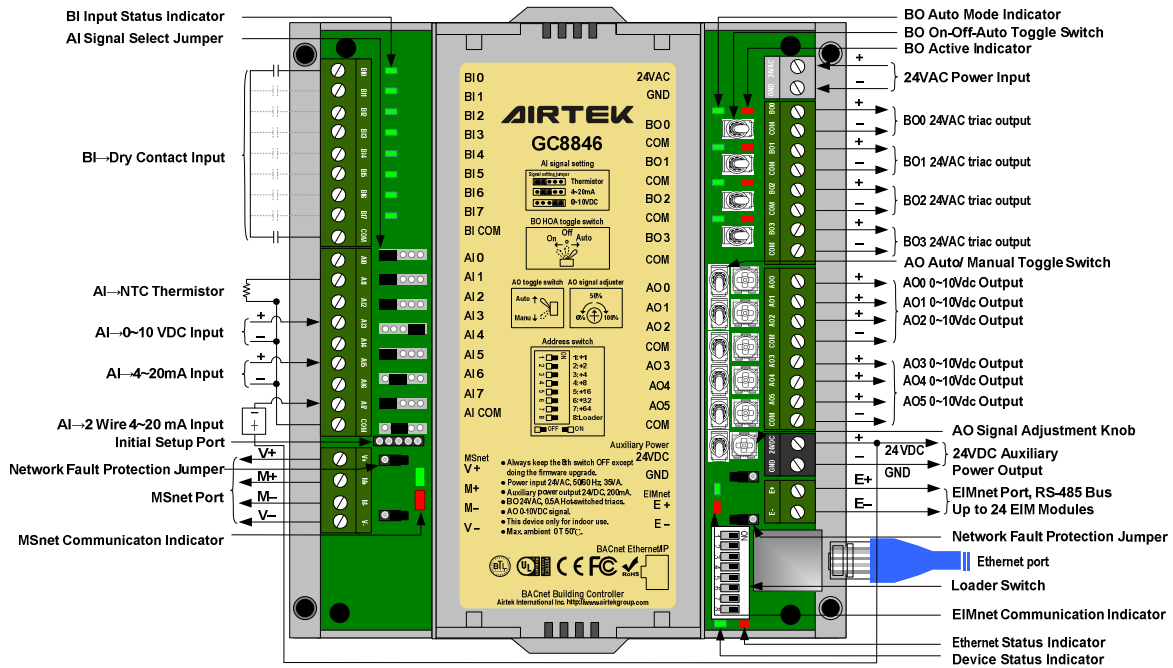
**Environment** : 0~50℃, 20~90%RH, non-condensing

**Certification** : CE(EMC Directive 2004/108/EC), FCC(Part 15, Subpart B, Class A), UL916, BTL(BACnet Testing Laboratory Listed BACnet Building Controller (B-BC)).

## 【Network Architecture】



## 【Wiring Diagram】



## 【Dimension】 Unit : mm

