

Field Control Layer Device

BACnet Building Controller

GC-8846(P)



GC8846P

【Description】

GC8846P is a POWERFULL BACnet B-BC class standalone controller with router function but can also be a communication bridge between workstation and field controllers. Onboard communications consist of 1 x 10/100M Ethernet port, 1 x MSTP port (32 Devices), 1 x selectable Modbus RTU or MSnet Port (direct connect HMI screens) and 1 x EIM Expansion port (24 Devices). It is equipped with 8BI/8UI/4BO/6AO on-board as well as being able to expand to 24 more EIM expansion modules making it a very versatile product that can be used for small to large point projects. There are many features such as 365 day Time Clock/Holidays etc, 100 Trend Logs, 100 schedules, 1000 Av&Bv points. Bo's have A/O/M switch & Ao's have A/M switch with adjustable pot to regulate 0-10vdc output which is very useful for commissioning/Testing.



【Features】

- BACnet Building Controller (B-BC) class listed device.
- Compliance BACnet Ethernet, BACnet/IP, and MS/TP communication standards as a router.
- An Ethernet communication interface can be either BACnet Ethernet (ISO-8802-2) or the BACnet/IP communication protocol.
- An MS/TP(Master-Slave/ Token-Passing) port, Peer to Peer communication. Can read (DS-RP-A/DS-RPM-A) and write (DS-WP-A) BACnet objects.
- A RS-232 port for setting up initial device parameters using a null modem or AD-linker cable and a Terminal program such as HyperTerminal.
- Di's have 1000VDC optical isolate protection and status indicator LED's.
- 16 bit Ui's, jumper selectable 3K or 10KΩ NTC thermistor, 4~20mA, or 0~10VDC, dry contact input signals.
- Triac Do's have 1000VDC optical isolate protection and status indicator LED's. Each Do have a Manual OFF-ON/Auto switch with internal override Flag status that can be used to trigger events or Alarms.
- Ao's are 12 bit, 0~10VDC output signals. Each Ao have an Auto-Man switch with adjustable 0-10vdc pot and also an internal override Flag status that can be used to trigger events or Alarms.
- On-line firmware updates and DDC program editing, real-time program debugging, significantly reducing the programming and editing time.
- Real-time clock, Calendars, Schedules, Notification Class, Event Enrollments, Trend-logs standard BACnet objects. Schedules and event enrollments support external object access function.
- Onboard 1,000 Binary Value with 16 Priority Array (BV) and 1,000 Analog Value (AV) points,
- Monitor and program over the internet.

【Specification】

Model	BI	AI	BO	AO	MS/TP device	Total EIM	Calendars	Schedules	Notification	Event	Trend-logs
GC8846P	8	8	4	6	32	24	10	100	10	100	100

Power Supply : 24VAC/VDC, 5VA.

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 triac outputs, with 24 VAC, 0.5A rated which have a common connection to the 24Vac supply attached manual On/Off /Auto selector switch.

Analog Output (AO) : 16-bit resolution, 0~10VDC output with onboard Auto-Manual override switch and regulating adjustable pot.

Auxiliary Power : Onboard 24VDC/160mA power supply for external transducers.

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

MS/TP Port : 2-wire MS/TP RS-485 bus, communication speed 9,600/ 19,200/ 38,400/ 76,800 bps, or auto select. 1,200 meters Lan Network, 2500Vrms optical coupling isolator and TVS ARRAY surge protection.

MSnet Port : 2-wire MODBUS RTU RS-485 bus, communication speed 9,600/19,200/38,400bps bps ,

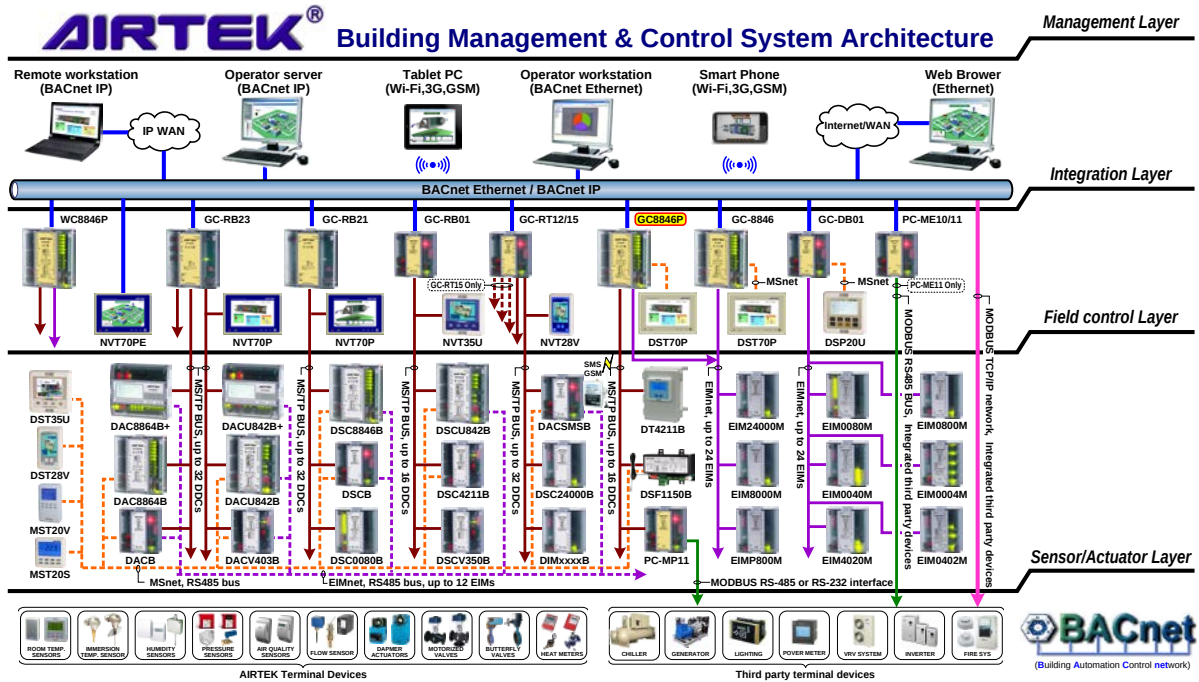
Clock : A build-in gold capacitor for 48 hours power failure back up.

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

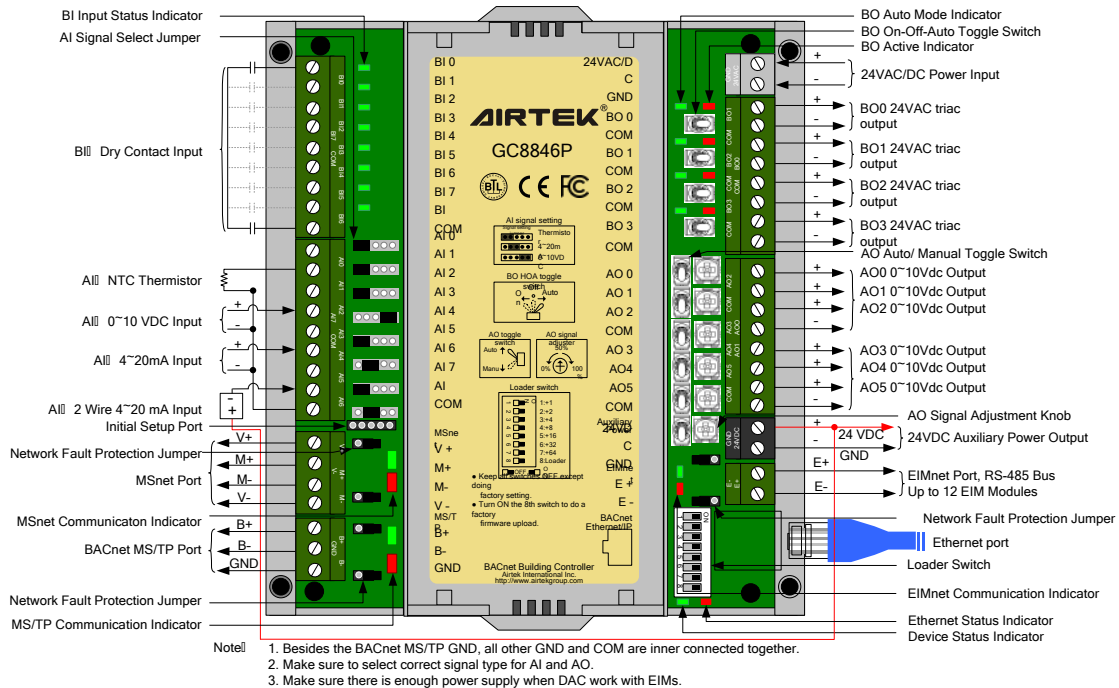
Environment : 0~50°C ,20~90%RH, non-condensing

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

【Network Architecture】



【Wiring Diagram】



【Dimension】 Unit : mm

