BACnet Integration Level Device

BACnet Ethernet Global Controller

GC-RB21

[Description]

GC-RB21 is a B-BC class BACnet LAN communication integration controller. It has router function. Operate independently. The GC-RB21 has two network communication abilities, For upper level, it can link to a 100 Bases-TX BACnet Ethernet with selectable either the BACnet Ethernet (ISO-8802-2) or the BACnet/IP communication method. For lower level, it can link to one network of BACnet MS/TP, the MS/TP network can link up to 32 controllers, communication speed can reach 76,800 BPS. The MS/TP RS-485 interface has 1,000V electrical isolated protection. GC-RB21 has programmable function and standard BACnet object, such as schedule, calendar and the event enrollment...etc. GC-RB21 device in conformity with international BACnet network communication and fully compatible with any BACnet system.



[Features]

- In conformity with BACnet MS/TP, BACnet Ethernet ISO-8802-2, BACnet/IP protocol formulated by ASHRAE fully compatible with any BACnet system.
- Use 32-bit high performance MCU, frequency 133MHz.
- 32MB SDRAM/96K RAM /512KB Flash, 512K FRAM for power failure memory, and optional SD card memory expension.
- B-BC level standard BACnet compliant controller plus the network router function.
- A 100 M Ethernet port for BACnet Ethernet(ISO-8802-2) or the BACnet/IP network connection.
- One BACnet MS/TP networks RS-485 ports, it can connect up to 32 MS/TP field controllers with transmission speed from 9.6 to 76.8
 Kbps. It has 1000VDC electrical isolated protection that can effectively avoid network abnormality signal influences the controller.
- One RS-232 port. Default value of this device can be modified by using its null modem and the Hyper Terminal in the Microsoft Windows system.
- On-line edited, downloaded the logic program as well as real-time program debugging function, significantly reducing the program logic the editor time.
- Operation functions of proportional, integration, differential, floating, logic, mathematic, enthalpy and dew point etc.
 Program executes cycle time 1 second.
- Real-time clock, 20 Calendars, 200 Schedules, 20 Notification Class, 200 Event Enrollments, 200 Trend-logs, standard BACnet object.
 Schedules and event enrollments support external object access function.
- Possessed 1,000 analog value (AV) points, 1,000 binary value (BV) points. The BV points have the priority function.

[Specification]

Model	Calendars	Schedules	Notification Class	Event Enrollments	Trend-logs	Binary Value (BV)	Analog Value (AV)
GC-RB01	20	200	20	200	200	1,000	1,000

Power Supply : 24VAC/DC, 5VA.

Microprocessor : 32-bit high performance microprocessor with 96K RAM and 512K Flash memory

Memory : 32 MB SDRAM and 512K FRAM as power failure memory

Ethernet Port : A 10/100M Ethernet with BACnet Ethernet (ISO-8802-3) communication protocol

MS/TP Port : One MS/TP RS-485 communication port, with 1000VDC electrical isolated protection, it can connect up to 32

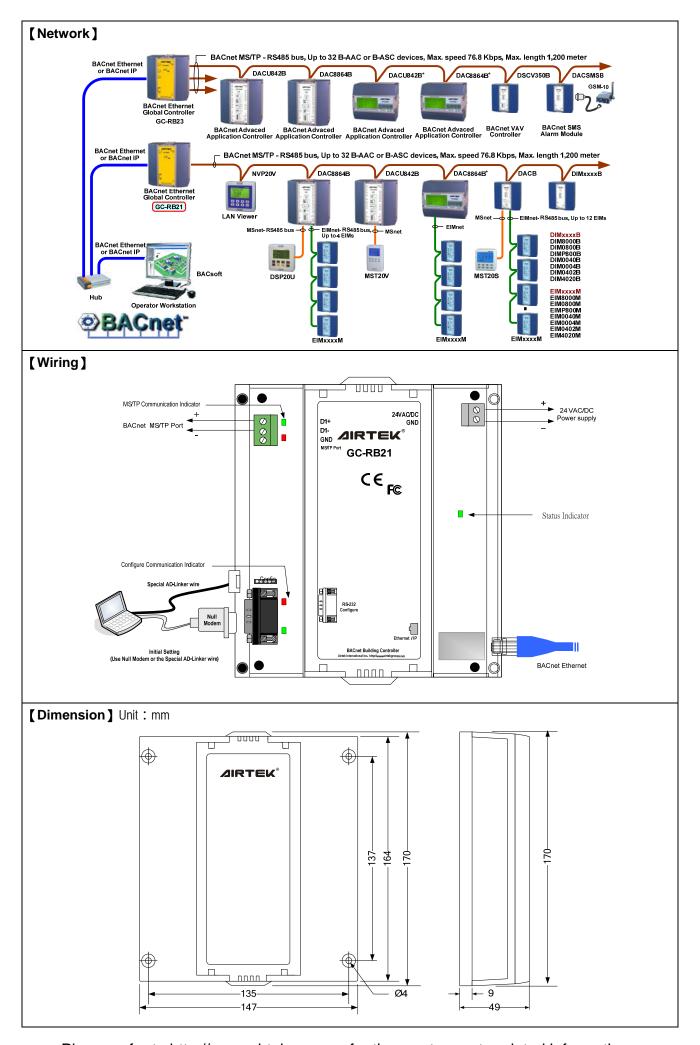
MS/TP devices

Clock : A gold capacitor to back up clock for 48 hours after power failure

Environment : $0 \sim 70^{\circ}\text{C}$, $0 \sim 95\%\text{RH}$, non-condense

Certificate : EMC Directive 89/336/EEC (European CE Mark). FCC Park15, Subpart B, Class A.





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