

# BACnet Integration Device

## BACnet Web Embedded Global Controller

# WC-RB..

### 【Description】

WC-RB.. series controller is a B-BC class BACnet LAN communication integration controller. It has Router function, Stand alone, and Web Embedded operating system. Suitable for use in buildings where there is a need to remotely manage the electrical and mechanical equipment, via a web browser. The WC-RB series can monitor and control mechanical and electrical equipment in real-time and can be accessed via an on-site client workstation or remote Web Browser. Programming, Calculations and Web Pages can be generated by using BACsoft software (No other software needed).



### 【Features】

- A web page embedded (Web Embedded) operating system.
- Use 32-bit high performance MCU, frequency 180MHz.
- With 64MB SDRAM and 16MB program memory space, the control program memory can be permanently preserved.
- A 100M Ethernet interface, optional BACnet Ethernet (ISO-8802-2) or BACnet / IP communications.
- One MS / TP (Master-Slave / Token-Passing) RS-485 port, can connect 32 DDC controllers (WC-RB12 only), communication speed up to 76,800 bps, transmission distance 1,200 meters, communication interface with 2,500 Vrms isolation and TVS ARRAY potential over voltage protection design.
- One EIMnet port, can connect 12 EIM expansion modules. (Only WC-FB11 and WC-FB12 only).
- One MSnet port, can connect DSP20U control panel (Only WC-FB11 and WC-FB12 only).
- Can be edited online, download the control logic program, and support for online real-time program debugging.
- A proportional, integral, differential, floating, logic, arithmetic and other operations functions and support subroutine computing functions.
- 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	Ethernet Port	MS/TP Port	DDC QTY	EIMnet Port	EIM QTY	MSnet Port
WC-RB10	1	0	0 set	0	0 set	0
WC-RB11	1	0	0 set	1	12 sets	1
WC-RB12	1	1	32 sets	1	12 sets	1

**Power Supply** : 24VAC/DC,5VA.

**Microprocessor** : 32-bit high performance microprocessor with 32K FRAM、64MB SDRAM and 16MB Flash memory.

**SD CARD Slot** : 1 SD Card Slot, Max. 2GB SD Card.

**Ethernet Port** : One 10/100M Ethernet port for Intranet, Internet, and BACnet communication.

**MS/TP Port** : One MS/TP RS-485 port for field controller connection, transmission rate 9,600/19,200/38,400/76,800 BPS adjustable, transmission distance 1,200 meter, with 2,500 Vrms isolation and TVS ARRAY. over-voltage protection.

**MSnet Port** : One MODBUS RTU RS-485 port for DSP20U connection、transmission rate 9,600/19,200/38,400 BPS adjustable.

**EIMnet Port** : One AIRTEK RS-485 port for max. 12 EIM modules connection, transmission rate 38,400 BPS.

**Configure Port** : One RS-232 Configure port for initial setup.

**Hardware clock** : Real-time Clock, attached to gold capacitor backup power design.

**Environment** : 0~70°C、0~95%RH non-condense.

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

**[Wiring]**

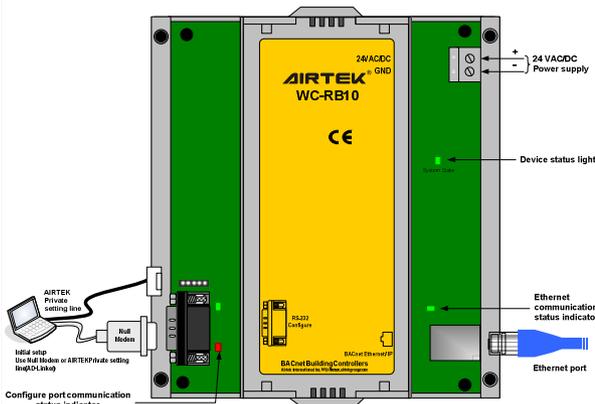


Figure 1. WC-RB10 wiring

**[Network]**

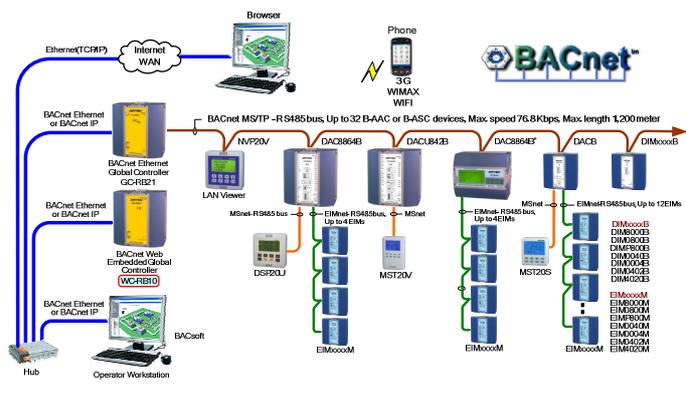


Figure 4. WC-RB10 network architecture

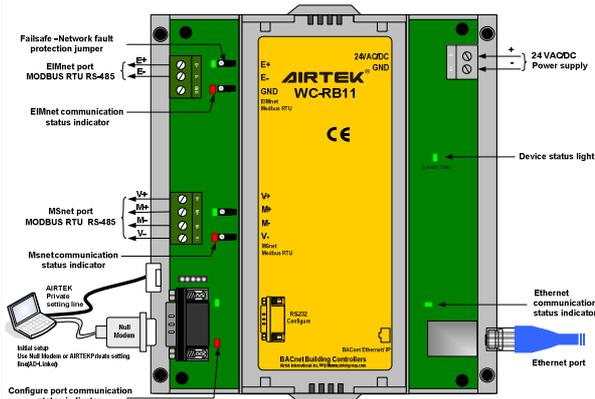


Figure 2. WC-RB11 wiring

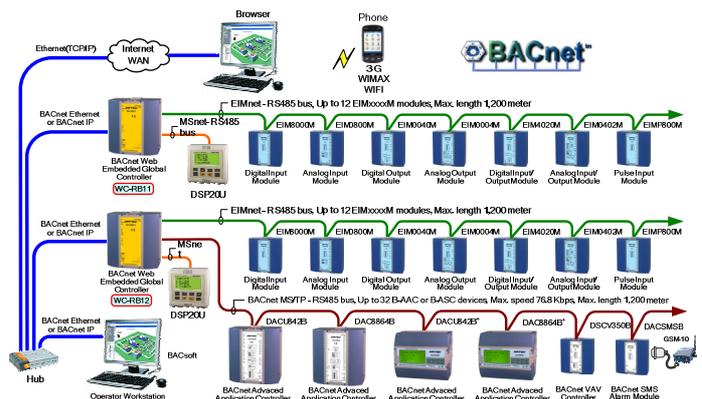


Figure 5. WC-RB11 & WC-RB12 network architecture

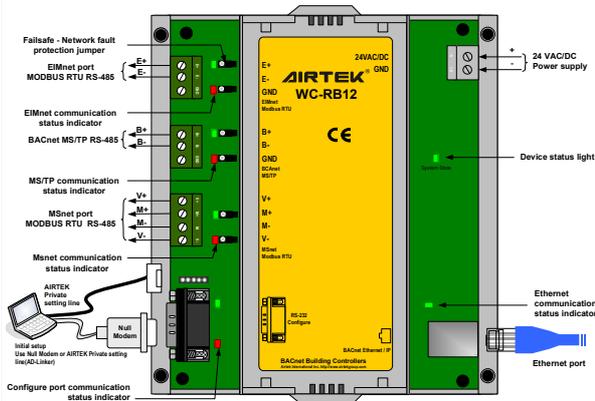


Figure 3. WC-RB12 wiring

**[Web Page]**

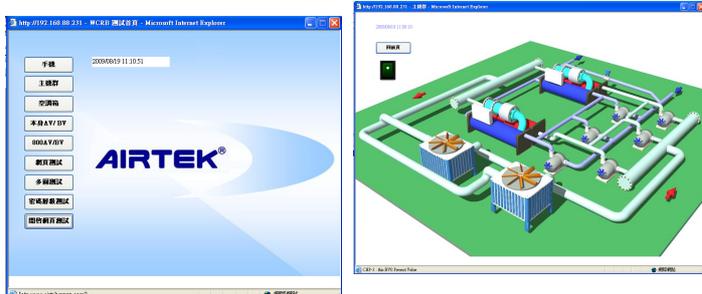
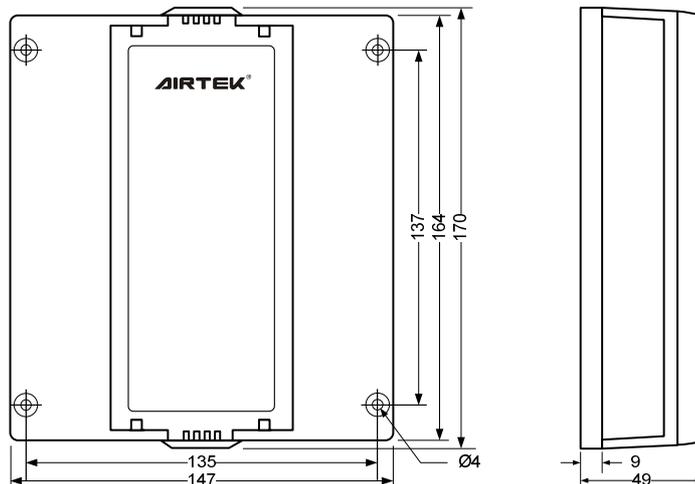


Figure 6. Web Page Example

**[Dimension] Unit : mm**



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