

BACnet Integration Device

PC-ME11

MODBUS to BACnet protocol interface

【Description】

PC-ME11 is a protocol converter for integration of automation control systems in industrial or commercial buildings. Integration of two different communication systems is possible by using MODBUS RTU/ASCII protocol and BACnet Ethernet protocol. PC-ME11 is useful for integration of MODBUS RTU/ASCII communication devices such as AHU, FCU network, chiller system, lighting system, multi-function meters, fire alarm system, and elevator control system. The BACnet Ethernet protocol of PC-ME11 conforms with ANSI, ASHRAE, European, and ISO standard and is fully compatible to any BACnet system.



【Features】

- A BACnet Ethernet port which can be set to be either BACnet Ethernet or BACnet/IP port.
- A MODBUS RTU/ASCII Master RS-485 and one RS-232 ports for connect to MODBUS RTU/ASCII Slave devices. LED indicator shows port communication status.
- It has 1000VDC electrical isolated protection that can effectively avoid communication interference.
- 1000 AV or BV points for data exchange between different protocol sources. Descriptions can be used for these points to make maintenance easy.
- It has MODBUS/TCP Server function, read MODBUS/TCP client data from 20 devices.
- MODBUS RTU/ASCII master port can be set up using BACsoft software. Supports floating point, long integer, BCD code and many other types of numbers.
- Each analog point can be selectable do one times add/subtract/multiply/divide operation to adjust its value. This function eliminates the ratio or value adjustment operation at BACnet application level.
- Programmable, online edit mathematic operations such as add/subtract/multiply/divide and logic operations such as AND, OR in program lines for flexible data usage and control.
- User can set a “block data transfer” which minimises communication traffic rather than one-by-one data transfer. The lock size depends on the maximum size of MODBUS buffer available.
- Power failure backup function, data stored in FRAM.

【Specification】

Model	Ethernet Port	MODBUS TCPTType	TDnet BUS	AV Points	BV Points
PC-ME11	BACnet Ethernet BACnet Ethernet/IP	Server	1	1,000	1,000

Power Supply : 24VAC/DC, 5VA.

Microprocessor : 32-bit high performance MCU, 128K RAM, 32K FRAM and 512K Flash memory.

BACnet Port : Standard BACnet Ethernet port, speed 100M.

TD net RS-485 Port : MODBUS RTU RS-485 bus, communication speed 9,800/ 19,200/ 38,400 bps adjustable, can work with 32 master or slave devices.

TD net RS-232 Port : MODBUS RTU RS-232 Port, DB-9 connector, support peer to peer communication, communication speed 9,800/ 19,200/ 38,400 bps adjustable, can work with 1 master or slave devices..

Protocol Convert : 1,000 data transfer commands for AV and BV points transfer between two different communication protocols. Online protocol setting is available.

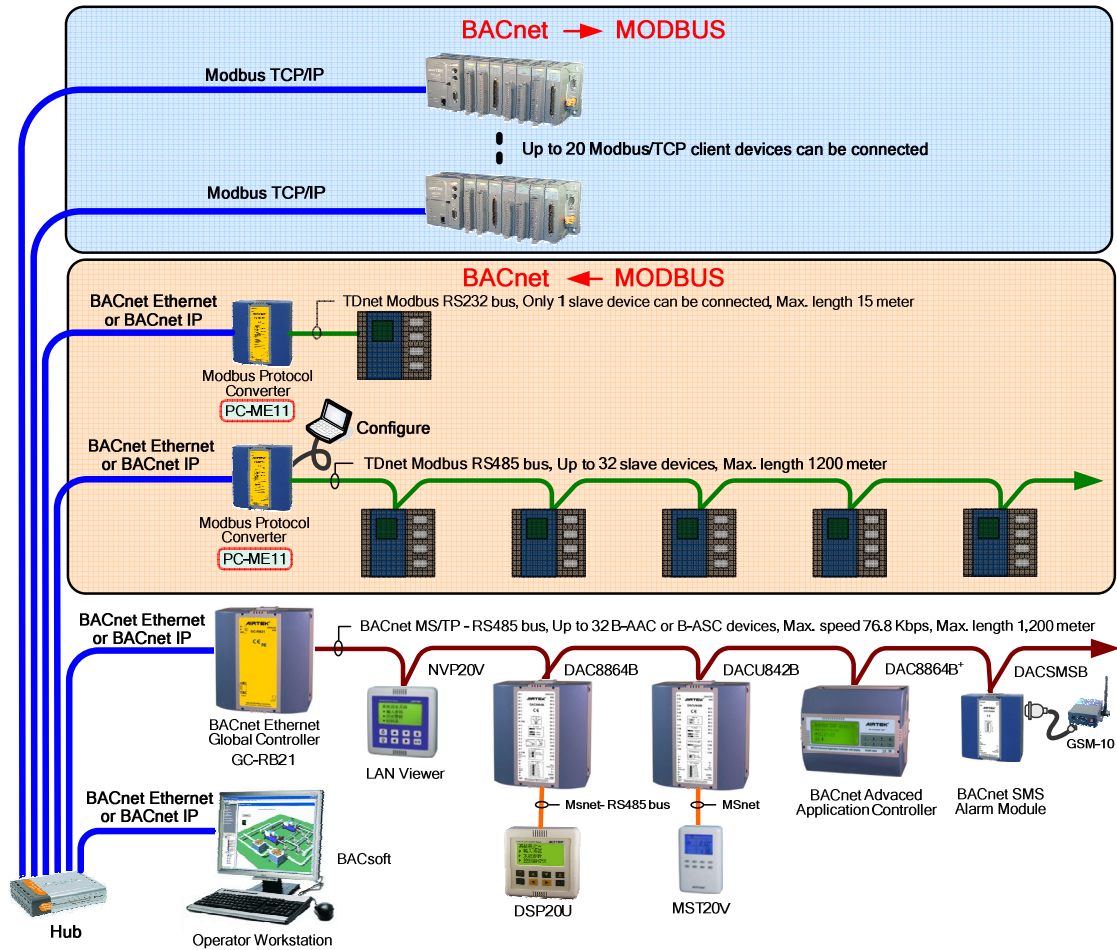
Environment : 0~50℃20~90%RH.

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

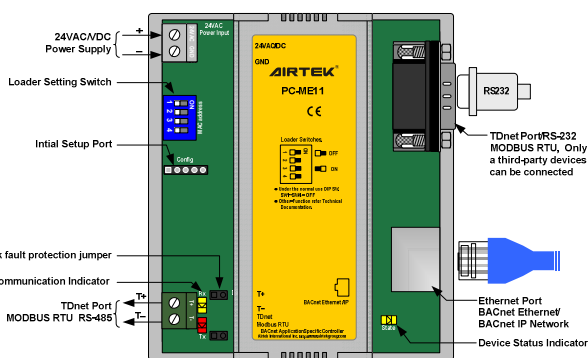
【Installation】

- PC-ME11 requires a separate 24VAC power supply. Do not share the same power supply with the other equipments.
- Modbus/TCP Server works with 20 TCP Client, default setting for TCP/IP Port is 502, adjustable.
- User must select only one MODBUS port at a time. Either RS-485 or RS-232.
- The Total number of device that can be connected to the MODBUS port is normally 32 devices for RS-485 network, a repeater is required for more devices. RS-232 can connect to only one device.
- The MODBUS port on this device is a MODBUS Master. It can only connect to MODBUS Slave devices. Data format and communication speed for devices on the Modbus Lan should all be the same.
- Install 120ohm "End of Line" resistors at both ends of the Modbus RS-485 network to prevent signal attenuation. Destination device should have Modbus RS-485/232 with standard Modbus RTU or Modbus ASCII Slave protocol.

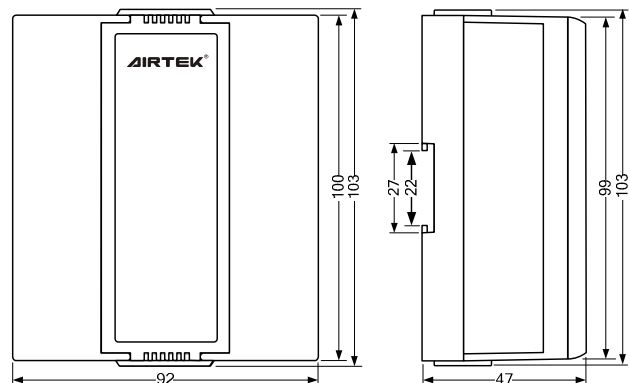
【Network】



【Wiring】



【Dimension】 Unit : mm



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