

# BACnet Field Control Device

## MODBUS to BACnet protocol interface

# PC-ME10

### 【Description】

PC-ME10 is a protocol converter for integration of automation control system in industrial or commercial buildings. Integration of two different communication systems using MODBUS/TCP protocol and BACnet Ethernet protocol is possible. PC-ME10 is used to integrate MODBUS/TCP 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-ME10 conforms with ANSI, ASHRAE, European, and ISO standard and fully compatible to any BACnet system.



### 【Features】

- A Ethernet port can be set to communicate with MODBUS/TCP and either BACnet Ethernet or BACnet/IP.
- 1000 AV or BV Bacnet points are available for data exchange between different protocol sources. Descriptions can be used for each point for easy identification.
- Its MODBUS/TCP Server function communicates with up to 20 MODBUS/TCP Clients to read/write present value of AV or BV points.
- Its MODBUS/TCP Client function communicates with up to 20 MODBUS/TCP Servers to read/write 1000 Register/Coil value and puts them in the present value of AV or BV points.
- To edit the read/write command of MODBUS/TCP Client by using AIRTEK BACsoft DDC editor. Floating point, long integer, signed integer and many other types of numbers are available for data types.
- Each analog point can be selectable do “one time” add/subtract/multiply/divide operation to adjust its value. This function eliminates the ratio or value adjustment operation at the BACnet application level.
- Programmable, online edit mathematic operations such as add/subtract/multiply/divide and logic operations such as AND, OR in program 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 block size depends on the maximum size of MODBUS buffer available.
- Power failure backup function, data is stored in FRAM.

### 【Specification】

Model	Ethernet Port	MODBUS TCP Type	BV Points	AV Points	Register/Coil
PC-ME10	BACnet Ethernet BACnet Ethernet/IP MODBUS TCP	Server + Client	1,000	1,000	1,000

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

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

**Ethernet Port** : BACnet Ethernet and MODBUS/TCP standard port.

**Protocol Convert** : 1,000 AV and 1,000 BV points communicate between two different communication protocols.  
Online protocol setting is available.

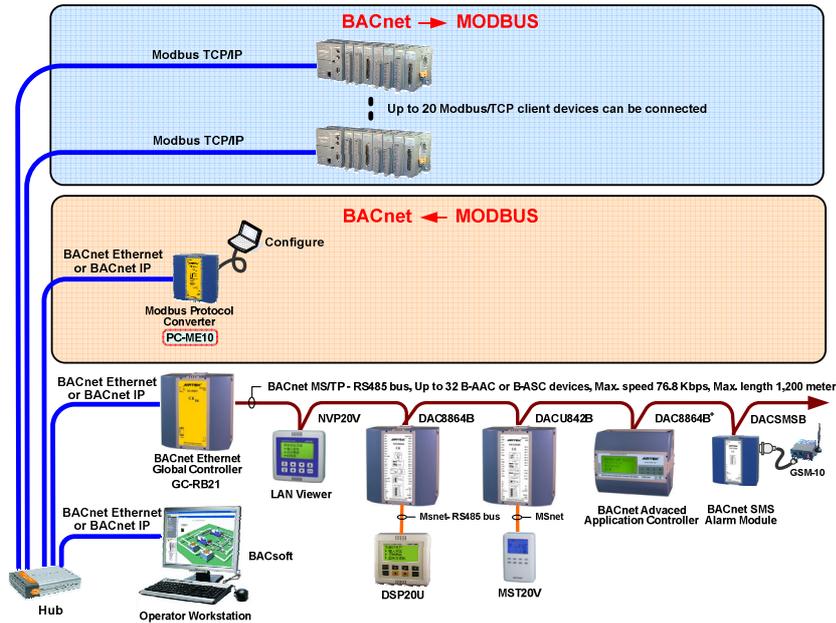
**Environment** : 0~50℃20~90%RH.

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

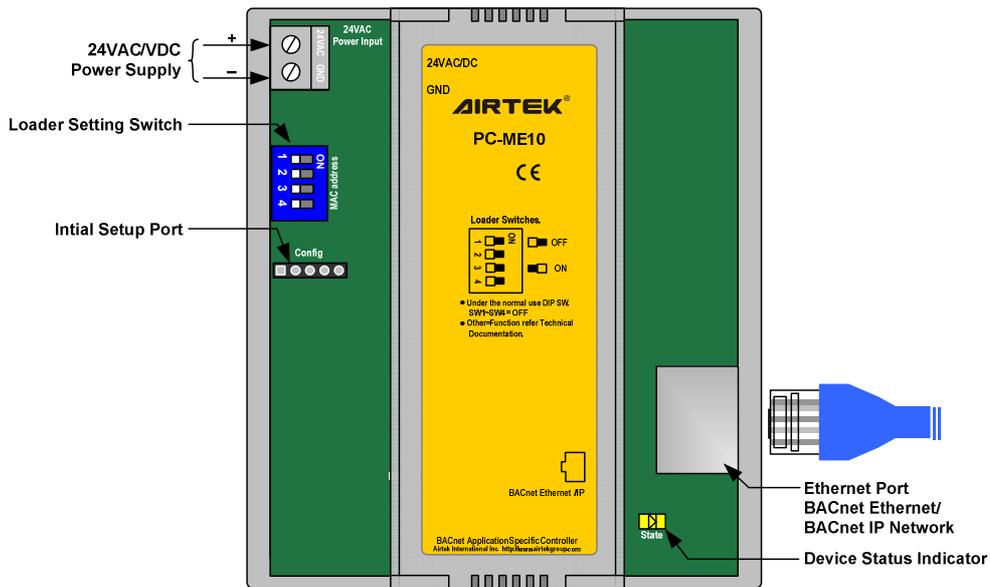
**【Installation】**

- PC-ME10 needs a sole 24VAC power supply. Do not share the same power supply with the other equipments.
- As a MODBUS/TCP Client, it can communicate with 20 TCP servers. Its address 1~20 are mapping to the TCP Server IP List ID 1~20.
- As a MODBUS/TCP Server, it can communicate with 20 TCP clients. Default value of TCP/IP Port is 502 and adjustable.

**【Network】**



**【Wiring】**



**【Dimension】** Unit : mm

