

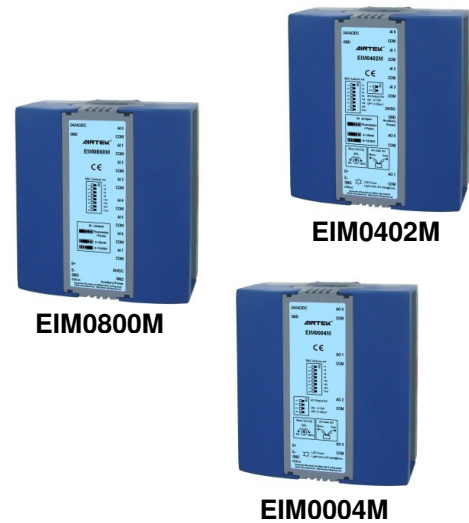
BACnet Field Control Device

EIM..M

Analog I/O Expansion Module

【Description】

EIM..M series of digital I/O expansion modules are designed as expansion modules for the Airtek range of controllers, the controllers must have an EIMnet port. EIM..M modules use a 32-bit microprocessor; transmission rates are selectable up to 38,400 bps. The analog input points have 12-bit resolution which provides high accuracy readings. The analog output points also have 12-bit resolution which can make a precise control. The physical points of EIM can be directly used by Airtek Controllers. The advantages of using EIM..M modules is that they can be mounted in close proximity to the device being controlled this reduces cabling runs and allows the service technician to carry out diagnostics local to the device being monitored and/or controlled.



【Features】

- EIM modules work with any AIRTEK controller that has an EIMnet port.
- Analog Input (AI) has 12-bit resolution, can be jumper selectable to accept 3KΩ or 10KΩ NTC thermistor, 0~5VDC, 0~10VDC, 0~20mA or 4~20mA input signal.
- Analog Output (AO) has 12-bit resolution, can be DIP switch and software selected as 0~10VDC, 2~10VDC, 0~20mA or 4~20mA output signal, each point has a manual override/auto/off output control switch.
- 8 MAC Address DIP switches for address 0~127.
- Low cost expansion of existing controller, they can be remotely located near equipment to minimize control wiring.
- I/O point of EIM modules are preset in the controller. No set up required, AI/AO of EIM will be AI/AO of the controller.
- Din rail mounting for easy installation.
- Plug-in terminal blocks and LED Indicators of communication and status are convenient for system debugging.

【Specification】

Model	AI Points	AO Points	Max. number of EIM module on each EIMnet port				
			DSCB	DAC...B	DACB	GC-DB01	WC-RB11/12
EIM0800M	8	0	4	4	12	24	24
EIM0004M	0	4					
EIM0402M	4	2					

Power Supply : 24VAC/DC, 1.5VA(Min)/6.5VA(Max).

Microprocessor : 32 bit high speed processor (MCU).

Analog Input (AI) : 12-bit resolution, jumper selectable to accept 3KΩ or 10KΩ NTC thermistor, 0~5VDC, 0~10VDC, 0~20mA, 4~20mA input signal.

Analog Output(AO) : 12-bit resolution, 0(2)~10VDC or 0(4)~20mA output, attached a manual override/auto output control switch. Minimum load for 0(2)~10VDC output is 1000 ohm. Maximum load for 0(4)~20mA is 500 ohm.
(Note: Only EIM04020M has 0(4)~20mA output signal.)

EIMnet Port : AIRTEK RS-485 bus, communication speed 9,600/19,200/38,400 bps adjustable.

Environment : 0~70°C · 0~95%RH non-condense

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

【Wiring】

- Separate power supply is recommended..
- For network communications using RS-485 transmission, Beldin 3106A cable or similar is recommended.
- RS-485 network must should be daisy chaine configuration, avoid T or Star shape configuration.
- RS485 network should be installed with End Of Line 120Ω termination resistors at both end, the total length should not exceed 1,200 meters.
- The input and output of EIM module suggest using Beldin 3106A cable or similar.
- **Warning!** Auto/Manual switch of AO points override controller programming.
- Do not apply 24vac/DC to Ai/Ao points.

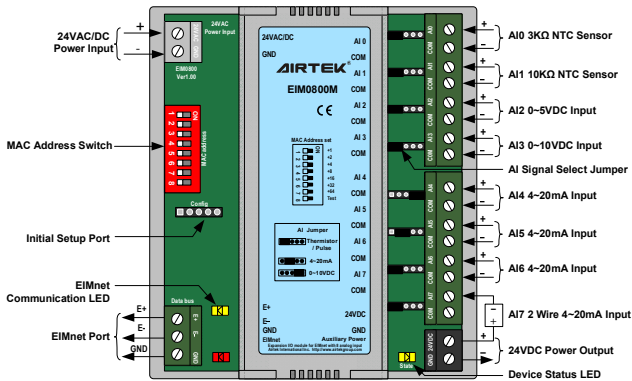


FIG. 1 EIM0800M

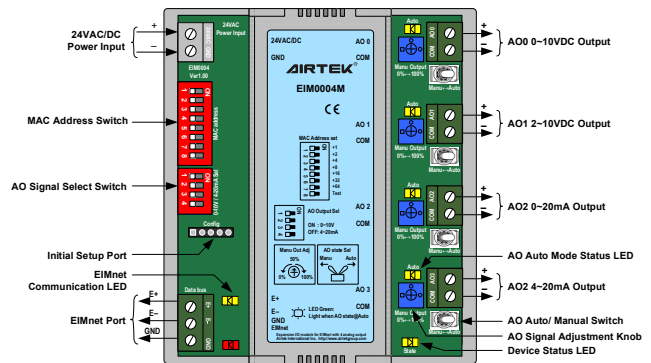


FIG. 2 EIM0004M

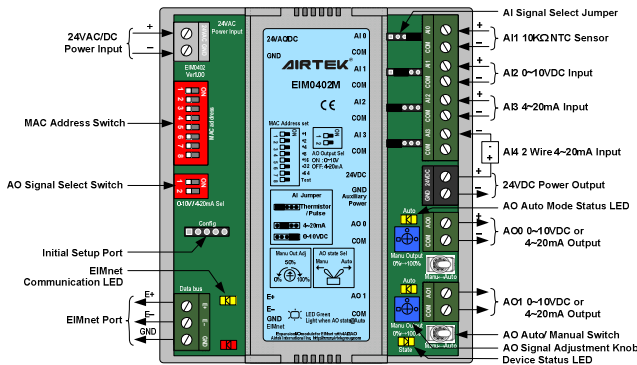


FIG. 3 EIM0402M

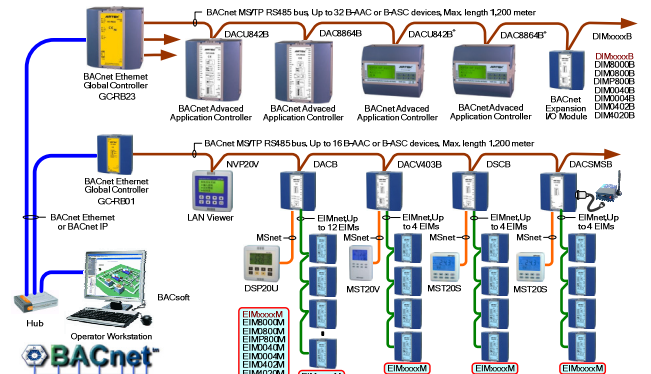
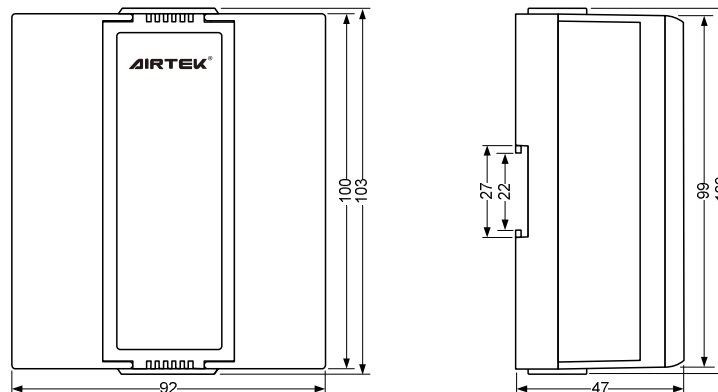


FIG. 4 Network architecture diagram

【Dimension】 Unit :mm



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