Field Control Layer Device

Digital I/O Expansion Module

EIM..M

EIM24000M&EIM8000M&EIM0080M&EIM0040M

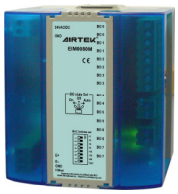
【Description】

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 binary and pulse inputs have 5,000Vrms optical isolation (noise filter), binary inputs accept dry contact or open collector type signal, pulse inputs accept up to 100HZ per sec signal. The binary outputs have 7A/250VAC/SPST dry relay contacts. The physical points of EIM can are converted directly into the controller as BI & BO points. 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.

EIM24000M

EIM8000M

EIMP800M


EIM0080M

EIM0040M

EIM4020M

【Features】

- Expansion modules work with any AIRTEK controller that has an EIMnet port.
- Binary Input (BI) and Pulse Input (PI) has 5,000Vrms are optical isolated and have a status indicator.
- Binary Ouput (BO) have 5,000Vrms optical isolation, status indicators and manual ON/OFF/AUTO sections select switch.
- 8 MAC Address DIP switches for address 0~127.
- Flexibility to configure the number of points to save on installation costs.
- Slide track design for space-saving and easy installation.
- Plug-in terminal blocks and LED Indicators of communication and status are convenient for system debugging.

【Specification】

Model	BI Points	BO Points	PI Points	Max. number of EIM module on each EIMnet port					
				DSCB	DSC….B	DACB	DAC….B	GC-DB01	WC-RB11/12
EIM24000M	24	0	0	12	12	12	12	24	24
EIM8000M	8	0	0						
EIMP800M	0	0	8						
EIM0080M	0	8	0						
EIM0040M	0	4	0						
EIM4020M	4	2	0						

Power Supply ：24VAC/DC, 2 VA.

Microprocessor ：32 bit high speed processor (MCU).

Binary Input (BI) ：Accept dry contact or open collector signal, 5,000Vrms optically isolated.

Pulse Input (PI) ：Accepts the up to 100HZ open collector or dry contact, 5,000Vrms optically isolated.

Binary Output (BO) ：7A/250VAC SPST dry contact outputs, 5,000Vrms optically isolated.

EIMnet Port ：Selectable communication speed 9,600/19,200/38,400 bps.

Environment ：0～70℃, 0～95%RH non-condense.

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

【Wiring Diagram】

- EIM..M uses 24VAC/DC power supply. Should not share the same power supply with the other equipments.
- EIM..B network communications using RS-485 transmission please use wire 2C#AWG18 ~22 overall shielded twisted configuration. Do not run cables with power cabling.
- RS-485 network must use daisy chain configuration, do not use T shape or star shape configuration.
- Use 120Ω termination resistors at both end of RS485 Network, the total cable length should not exceed 1,200 meters.
- Suggest to use #AWG 22 shielded cable for input/output cabling.
- Warning! The onboard Auto/OFF/Manual switch for the Relay outputs (BO) points override any program commands.
- The Relay outputs of EIM modules are rated at 7A/250VAC capacity, do not exceed this capacity or damage may result.

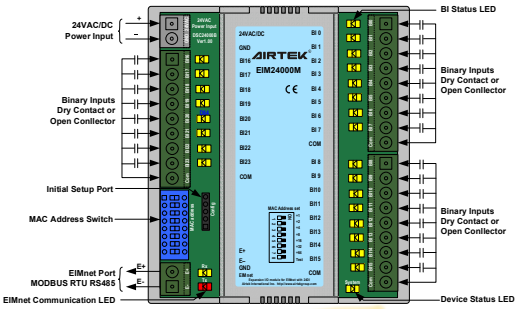


FIG. 1 EIM24000M

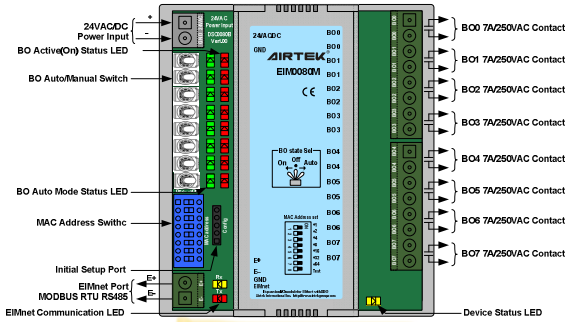


FIG. 2 EIM0080M

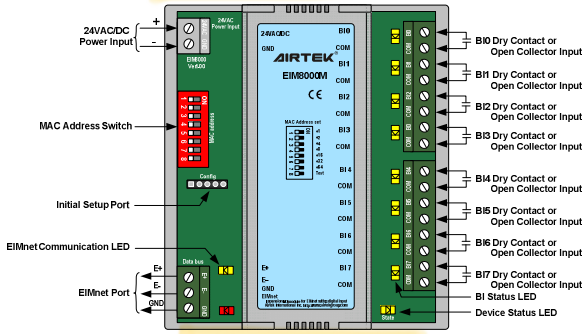


FIG. 3 EIM8000M

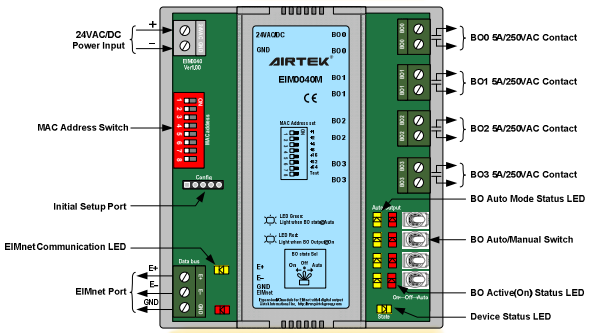


FIG. 4 EIM0040M

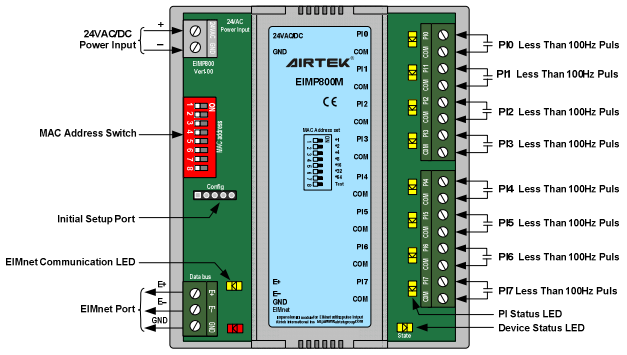


FIG. 5 EIMP800M

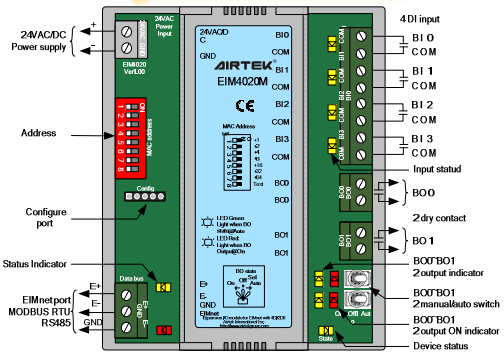
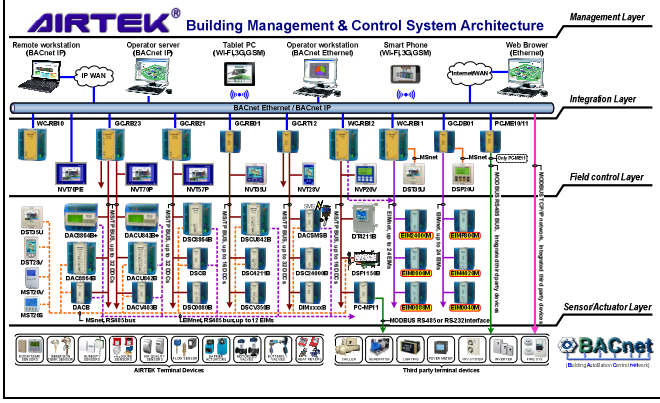
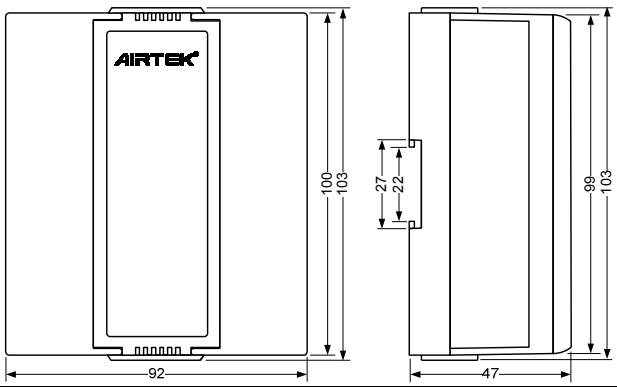


FIG. 6 EIM4020M

【Network Architecture】



【Dimension】Unit : mm



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