

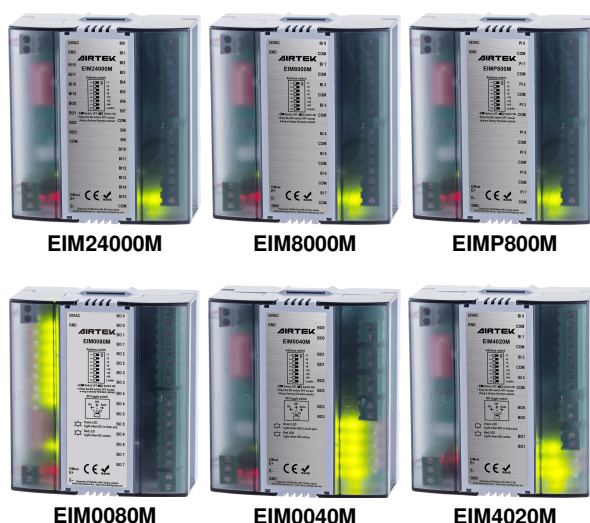
Field Control Layer Device

EIMnet Digital I/O Expansion Module

EIM..M

【 Description 】

EIM..M series of digital I/O expansion module is a remote control unit follows the format of MODBUS RTU communication rule, the main purposes are increasing I/O points for AIRTEK DDC. It works with any controller which has an EIMnet port. EIM..M uses 32-bit microprocessor core, transmission rate up to 38,400 bps. Theirs binary and pulse inputs have 5,000Vrms optical coupling isolates to block noise feature, Binary inputs accept dry contact or open collector signal, Pulse inputs accept the largest 100HZ signal. Their binary output is a dry contact with a capacity of 90VA, it can control facilities directly. The physical points of EIM can be directly converted to DDC's BI / BO points. Therefore, setting or transfer of these I/O points is not required. The controller can use these points directly. EIM..M makes the arrangement of control points flexible, save money, and helps to control all related control points in a single program. It is absolutely the best product for your building.



【 Features 】

- An AIRTEK RS-485 communication interface works with any AIRTEK controller that has an EIMnet port.
- Binary Input(BI) and Pulse Input(PI) has 5,000Vrms optical coupling isolates and status indicator design.
- Binary output (BO) has 5,000Vrms optical coupling isolate, status indicators and manual on / off / auto three sections select switch.
- 8 MAC Address DIP switches for address 1~127.
- When applied to MS/TP network situations, the flexibility to configure the number of points to save investment 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 debug.

【 Specification 】

Model	Power consumption	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	2VA	24	0	0	12	12	12	12	24	24
EIM8000M	2VA	8	0	0						
EIMP800M	2VA	0	0	8						
EIM0080M	3.5VA	0	8	0						
EIM0040M	3VA	0	4	0						
EIM4020M	2.5VA	4	2	0						

Power Supply : 24VAC

Microprocessor : 32 bit high speed processor (MCU).

Binary Input (BI) : Accept dry contact or open collector signal, having 5,000Vrms optical coupling isolates.

Pulse Input (PI) : Accept the largest 100HZ open collector or dry contact, having 5,000Vrms optical coupling isolates.

Binary Output (BO) : SPST dry contact relay , having 5,000Vrms optical coupling isolates.

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

Environment : 0~50℃, 5~95%RH non-condense.

Certification : UL916,CE, RoHS

【Wiring Diagram】

- Please use 24VAC independent dedicated power supply, do not share the power supply with other equipment, so as to avoid the short circuit burnout caused by the difference in circuit design.
- For the RS-485 communication network, please use the electromagnetic shielded twisted pair configuration with a wire diameter of AWG18 or more, and wrap it with an EMT metal conduit. Please do not share it with the power line or power line to avoid interference.
- The RS-485 communication network route must be configured in a daisy-chain manner with one input and one output, and no divergence or star configuration is allowed. 120Ω terminal resistors should be installed at the front and back ends of the network, and the total length of the network cable should not exceed 1,200 meters.
- Please use shielded cable above AWG22 for the analog input and output lines to obtain the best transmission and control quality.
- Please use the PVC cables of 0.75mm² or more for the digital input and output lines to obtain the best transmission and control quality.
- The BO hand/auto switch of EIM..M must be placed in the automatic position to accept command control, and the automatic position must be restored after the manual test is completed.
- The BO point of EIM..M is a dry contact with a capacity of 90VA. Its voltage and current ranges are: 24VAC/3.7A, 12VDC/7A. Do not control electromechanical equipment exceeding this capacity. When exceeding this capacity, an auxiliary relay or electromagnetic switch must be added.

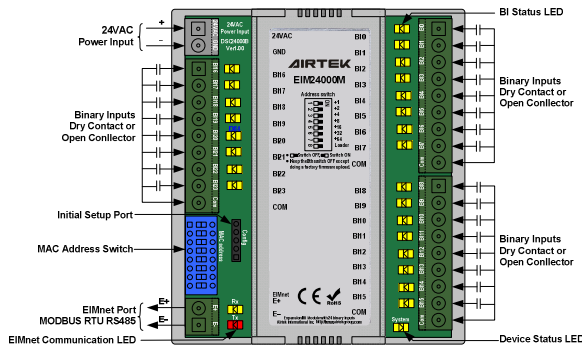


FIG. 1 EIM24000M

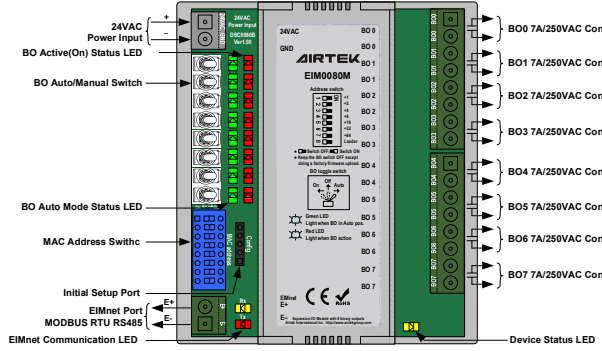


FIG. 2 EIM0080M

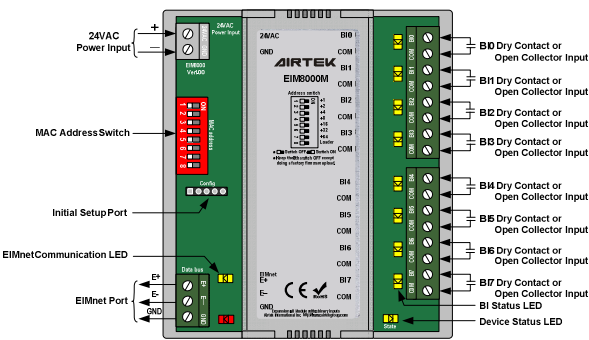


FIG. 3 EIM8000M

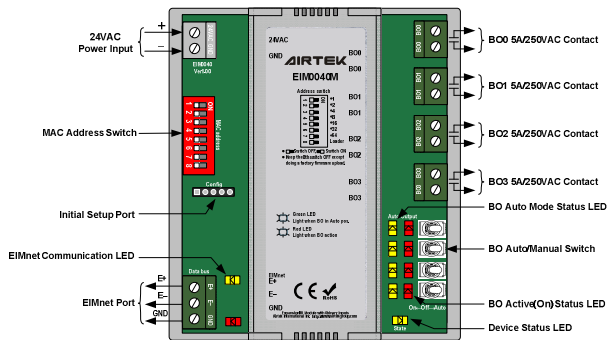


FIG. 4 EIM0040M

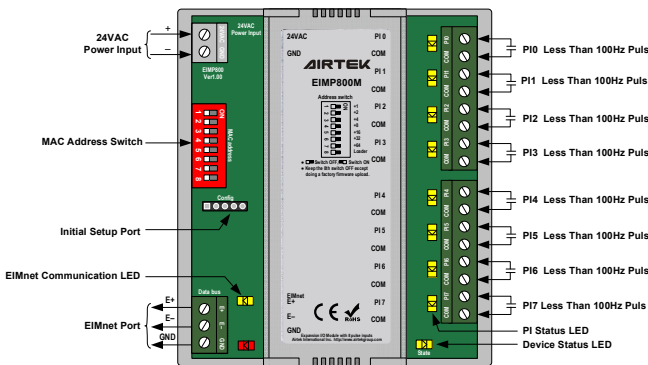


FIG. 5 EIMP800M

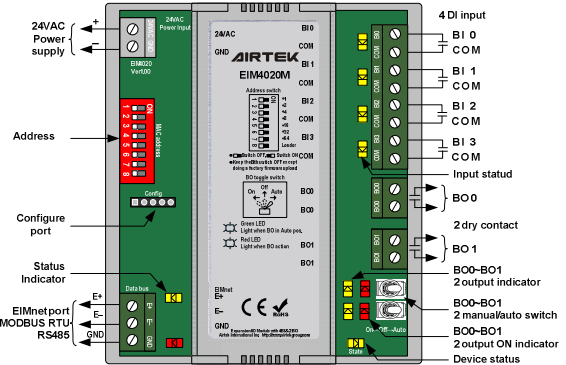
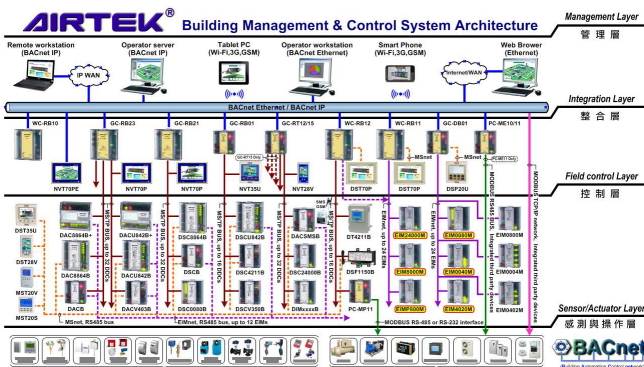


FIG. 6 EIM4020M

【Network Architecture】



【Dimension】 Unit : mm

