## 3-8. Expansion Controller [PAC-YG50ECA]
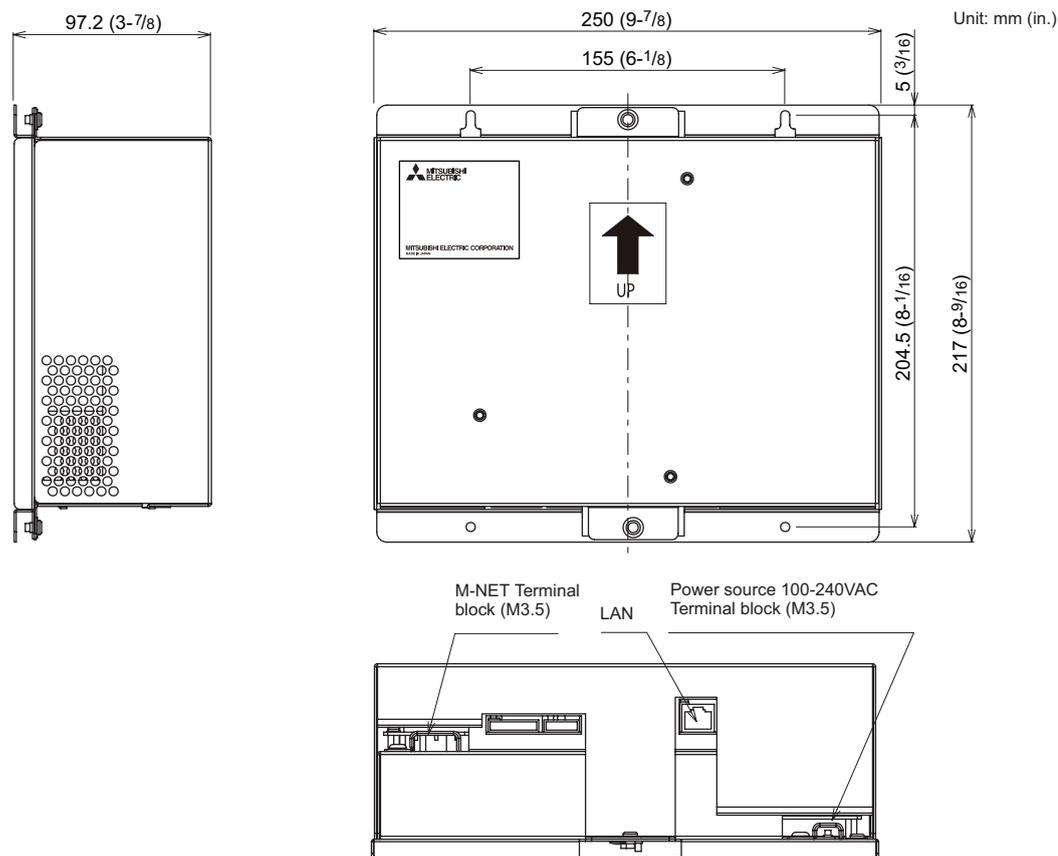
・PAC-YG50ECA can enhance units that AG-150A can control up to 150 by connecting 3 Expansion Controller (PAC-YG50ECA).
・PAC-YG50ECA has a built-in function to supply power to the M-NET transmission line. (power supply coefficient:6)

### 1.Specifisations

| Items | | | Specifications |
|---|---|---|---|
| Power source | Rated input | | 100-240VAC ±10%0.4-0.3A50/60Hz |
| | Fuse | | 250VAC  3.15A Time-delay  Type (IEC127-2.S.S.5) |
| Interface | Rated output of the power supply to M-NET transmission lines | | 22-30VDC |
| | External input/output | | 12VDC or 24VDC (requires an external power supply) |
| | LAN | | 100BASE-TX/10BASE-T |
| Ambient conditions | Temperature | Operating temperature range | -10~55°C [14~131°F] |
| | | Storage temperature range | -20~60°C [-4~140°F] |
| | Humidity | | 30~90%RH (Non-condensing) |
| Dimensions | | | 217 (H) × 250 (W) × 97.2 (D) mm [8-$9/16$(H) × 9-$7/8$(W) × 3-$7/8$(D)in.] |
| Weight | | | 2.6kg  [ 5 - $3/4$ lbs. ] |
| Installation conditions | | | Inside the metal control board (indoor) |

### 2.External dimensions

**Controller** *(side tab)*

## 3.M-NET power supply

PAC-YG50ECA has a built-in function to supply power to the M-NET transmission line. (power supply coefficient:6)
When power is supplied from PAC-YG50ECA , the types of system controllers listed in the table below are connectable.

| | System controller | | M-NET remote controller |
|---|---|---|---|
| | ON/OFF remote controller | System remote controller Schedule timer Group remote controller | ME remote controller LOSSNAY remote controller |
| Power consumption coefficient | 1 | 0.5 | 0.25 |
| Connectable units | 6 units | 12 units | 24 units |

V:connectable

| | | Total number of ON/OFF remote controllers | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Total number of system remote controllers, schedule timers, and group remote controllers combined. | 0 | V | V | V | V | V | V | V |
| | 1 | V | V | V | V | V | V | |
| | 2 | V | V | V | V | V | V | |
| | 3 | V | V | V | V | V | | |
| | 4 | V | V | V | V | V | | |
| | 5 | V | V | V | V | | | |
| | 6 | V | V | V | V | | | |
| | 7 | V | V | V | | | | |
| | 8 | V | V | V | | | | |
| | 9 | V | V | | | | | |
| | 10 | V | V | | | | | |

Note:
・AG-150A, GB-50A, and BAC-HD150 cannot be used in the same M-NET system.
・Supplying power from the Outdoor unit or the power supply unit, it is necessary to replace power supply switch connector CN40 with CN41.(Factory default is CN40.)

## 4.Functions

| Item | Description | Operations | Display |
|---|---|---|---|
| Error | When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed. When an error occurs, the "Error" LED turns ON. | × | ○ |
| External input/output | By using accessory cables you can set the following. Input: By level signal: "Batch start/stop", "Batch emergency stop" By pulse signal: "Batch start/stop", "Enable/disable local remote controller" | ○*1 | × |
| | By using accessory cables you can monitor the following. Output: "Start/stop", "Error/Normal" | × | ○*1 |
| M-NET | The "M-NET" LED lights, when AC power supply is turned ON. The LED blinks while M-NET communicating. | × | ○ |

[ Symbol ○:enable ×:disable ]

*1: Requires the external I/O cable (PAC-YG10HA) sold separately.

## 4.System configuration

Do not connect directly to the Internet. When connecting to the Internet through the AG-150A etc., use a security device such as a VPN router.

Each unit can control up to a total of 2000 indoor, LOSSNAY, and other units.

| | |
|---|---|
| ═══ | LAN |
| ▬▬▬ | M-NET |
| ──── | 24VDC |

PC for centralized control
(TG-2000A)

HUB

HUB

Each AG-150A unit can control up to a total of 150 indoor, LOSSNAY, and other units (when used with three expansion controllers).

*1:Do not use M-NET terminal.

*1
24VDC

*1

AG-150A

PAC-SC51KUA

PAC-YG50ECA

M-NET

M-NET

Outdoor unit

Indoor unit

LOSSNAY unit

ME remote controller

M-NET

Outdoor unit

Indoor unit

LOSSNAY unit

ME remote controller

LAN

PAC-YG50ECA

M-NET

M-NET

Outdoor unit

Indoor unit

LOSSNAY unit

ME remote controller

PAC-YG50ECA

M-NET

M-NET

LOSSNAY unit

LOSSNAY unit

LOSSNAY unit

LOSSNAY unit

HUB

Each AG-150A unit can control up to a total of 50 indoor, LOSSNAY, and other units (without the use of expansion controllers).

AG-150A

M-NET

M-NET

Outdoor unit

Indoor unit

LOSSNAY unit

ME remote controller

24VDC

PAC-SC51KUA