# Panasonic® FP I/O Terminal Unit

**Installation Instructions**

Read these instructions carefully and carry out the installation in the prescribed manner.
After installation, keep it in a safe place for reference when required.

## ■Safety Precautions

### ⚠ WARNING

- Always take precautions to ensure the overall safety of your system, so that the whole system remains safe in the event of failure of this product or other external factor.
- Do not use this product in areas with inflammable gas. It could lead to an explosion.
- Exposing this product to excessive heat or open flames could lead to damage to the lithium battery or other electronic parts.

### ⚠ CAUTION

- To prevent excessive exothermic heat or smoke generation, use this product at the values less than the maximum of the characteristics and performance that are assured in these specifications.
- Do not dismantle or remodel the product. It could lead to excessive exothermic heat or smoke generation.
- Do not touch the terminal while turning on electricity. It could lead to an electric shock.
- Use the external devices to function the emergency stop and interlock circuit.
- Connect the wires or connectors securely. The loose connection could lead to excessive exothermic heat or smoke generation.

## 1 Before using the unit

### ■ Operating environment

- Ambient temperature : 0 to + 55 ℃
- Ambient humidity : 30 to 85 % RH (at 25℃, no condensation)
- Places without excessive dust, oil mist, conductive dust, and any inflammable and corrosive gases.
- Pollution Degree 2
- Places unexposed to water, oil and chemicals.
- Places without excessive vibration or shock.
- Places away from high voltage cables (equipment), power transmission lines (equipment), radio transmitters, equipment that would generate high switching surge and the top of equipment with high calorific power. (Distance: At least 100 mm)
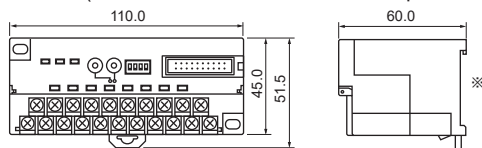
### ■ Proper handling

- Do not touch connector pins directly to prevent static electricity from causing damage.
- Always rid yourself of any static electricity before handling this product.

## 2 Part names and dimensions

### ■ Proper handling

(Unit: mm)
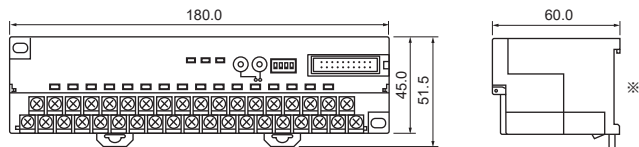
1) 8-point unit (Common to Standard unit and Expansion unit)
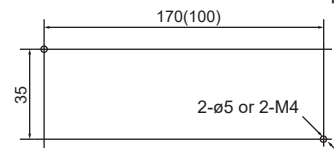


※ Fits in the DIN rail (width: 35mm).

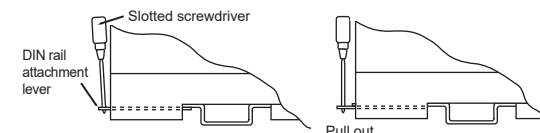2) 16-point unit (Common to Standard unit and Expansion unit)



## ■Installation (to attach bolts)

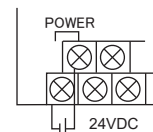- Common to Standard unit and Expansion unit



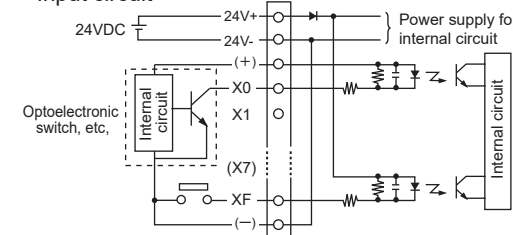## ■Installing to a DIN rail

- 35mm DIN rail



## 3 Wiring

### ■Connecting diagrams of power supply and I/O terminals
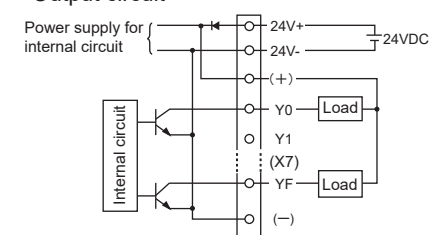(Common to Standard unit and Expansion unit)



- The power supply input (24V+) terminal and each (+) terminal, and the power supply input (24V-) terminal and each (-) terminal are electrically conducted internally.
  If using (+) and (-) terminals as common terminals, the (+) and (-) terminals near the I/O terminals should be used.
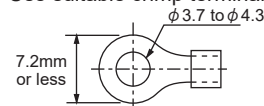
- Input circuit



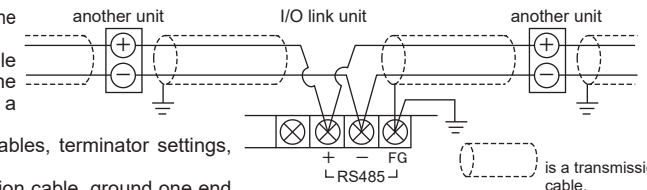- Output circuit



### ■Terminals

- Use suitable crimp terminals as below. (M3.5)



- Suitable crimp terminals are bare round type terminals, bare round type terminals with insulating papar and fork type terminals.
- Securely fastern the terminals applying a tightening torque of 0.5 to 0.6 N m.

### ■Connecting diagram of transmission line

- For the transmission cables, connect the (+) and (+) sides, and (-) and (-) sides.
- The wiring of the transmission cable should extend from one unit to the next. Do not run two wires from a single unit to two other units.
- For the details of recommended cables, terminator settings, refer to MEWNET-F Manual.
- When using the shielded transmission cable, ground one end of the shield.



Moreover, when using the FP2 series, in addition to this instructions, familiarize yourself with the manual right.

| Manual |
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| Programmable Controller MEWNET-F (Remote I/O System) Manual |

Please visit our website for inquiries and about our sales network.