

POWER SUPPLY MODULE	MODEL R5-PS
----------------------------	--------------------

BEFORE USE

Thank you for choosing M-System. Before use, please check contents of the package you received as outlined below. If you have any problems or questions with the product, please contact M-System’s Sales Office or representatives.

■ PACKAGE INCLUDES:

Power supply module(1)

■ MODEL NO.

Confirm Model No. marking on the product to be exactly what you ordered.

■ INSTRUCTION MANUAL

This manual describes necessary points of caution when you use this product, including installation, connection and basic maintenance procedures.

POINTS OF CAUTION

■ CONFORMITY WITH EU DIRECTIVES

- This equipment is suitable for Installation Category II (transient voltage 2500V), Measurement Category II (RUN contact output, transient voltage 2500V) and Pollution Degree 2. Reinforced insulation (internal power or RUN contact output to power input to FG: 300V) and basic insulation (internal power to RUN contact output: 300V) are maintained. Prior to installation, check that the insulation class of this unit satisfies the system requirements.
- Insert a noise filter for the power source connected to the unit. TDK-Lambda Noise Filter Model RSAN-2006 or equivalent is recommended.
- Altitude up to 2000 meters.
- The equipment must be mounted inside the instrument panel of a metal enclosure.
- The equipment must be installed such that appropriate clearance and creepage distances are maintained to conform to CE requirements. Failure to observe these requirements may invalidate the CE conformance.
- The actual installation environments such as panel configurations, connected devices, connected wires, may affect the protection level of this unit when it is integrated in a panel system. The user may have to review the CE requirements in regard to the whole system and employ additional protective measures to ensure the CE conformity.

■ POWER INPUT RATING & OPERATIONAL RANGE

- Locate the power input rating marked on the product and confirm its operational range as indicated below:
 85 – 132V AC rating: 85 – 132V, 47 – 66 Hz, approx. 90VA
 170 – 264V AC rating: 170 – 264V, 47 – 66Hz, approx. 90VA
 24V DC rating: 24V ±10%, approx. 45W or 1.8A

■ GENERAL PRECAUTIONS

- Before you remove the unit from its base or mount it, turn off the power supply for safety.

■ ENVIRONMENT

- Indoor use.
- When heavy dust or metal particles are present in the air, install the unit inside proper housing with sufficient ventilation.
- Do not install the unit where it is subjected to continuous vibration. Do not subject the unit to physical impact.
- Environmental temperature must be within -10 to +55°C (14 to 131°F) with relative humidity within 30 to 90% RH in order to ensure adequate life span and operation.

■ WIRING

- Do not install cables close to noise sources (relay drive cable, high frequency line, etc.).
- Do not bind these cables together with those in which noises are present. Do not install them in the same duct.

■ RUN CONTACT OUTPUT

• Function of RUN contact output

During a Network Module communicates normally with a master device (PLD or PC etc.), RUN contact output of Power Supply Module turns ON.

• When using with dual redundant communication or two system

During both Network Module or one of them communicates normally with a master device (PLD or PC etc.), RUN contact output of Power Supply Module turns ON.

• When using R5-PS with redundant or two system

RUN contact output works in same function for both cases. However, when I/O capacity code of installation base is “05:5 slots (single network module)” or “09: 9 slots (single network module)”, the RUN contact output of Power Supply Module installed in a Extender Power Module Base (model: R5-EX1) is not available.

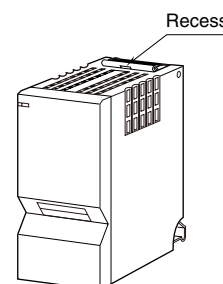
■ AND

- The unit is designed to function as soon as power is supplied, however, a warm up for 10 minutes is required for satisfying complete performance described in the data sheet.

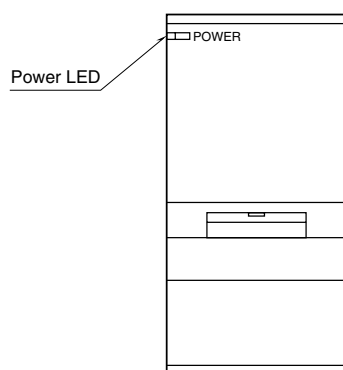
INSTALLATION

Use the Installation Base (model: R5-BS) or the Extender Power Module Base (model: R5-EX1).

In order to separate the Power Supply Module from a base, push the recess at the center of the locking clamp (See below) with a minus screwdriver.



COMPONENT IDENTIFICATION

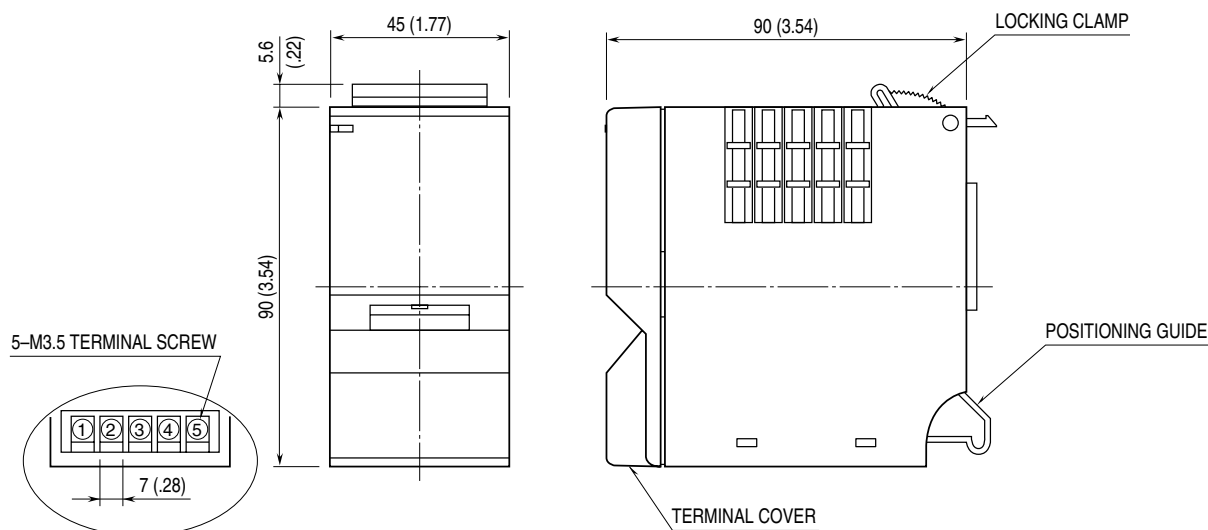


Power LED: Bi-color (red/amber) LED;
 Red when the power is supplied;
 Amber at RUN contact output ON.

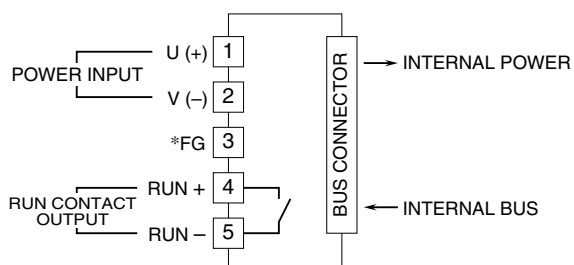
TERMINAL CONNECTIONS

Connect the unit as in the diagram below.

EXTERNAL DIMENSIONS unit: mm (inch)



CONNECTION DIAGRAM



*In order to improve EMC performance, bond the FG terminal to ground.
 Caution: This terminal is NOT a protective conductor terminal.

WIRING INSTRUCTIONS

SCREW TERMINAL

Torque: 0.8 N·m

SOLDERLESS TERMINAL

Refer to the drawing below for recommended ring tongue terminal size. Spade tongue type is also applicable.
 Applicable wire size: 1.04 to 2.63 mm² (AWG16 to 14)
 Recommended manufacturer: Japan Solderless Terminal MFG. Co., Ltd., Nichifu Co., Ltd.

