Screw Terminal Ultra-Slim Signal Conditioners M6N Series

**ISOLATOR**

**Functions & Features**
- 7.5-mm wide ultra-slim design
- Low profile allows the M6N module mounted in a 120-mm deep panel
- Galvanically isolates process instrumentation signals
- High-density mounting
- Power indicator LED

**MODEL: M6NYV-[1][2]-[3][4]**

**ORDERING INFORMATION**

- Code number: M6NYV-[1][2]-[3][4]
  Specify a code from below for each [1] through [4].
  (e.g. M6NYV-4W4W-R/K/UL/Q)
- Specify the specification for option code /Q
  (e.g. /C01)

**[1] INPUT / [2] OUTPUT**

| AA | 4 - 20 mA DC (Input resistance 50 Ω) |
| A6 | 4 - 20 mA DC (Input resistance 50 Ω) |
| 6A | 1 - 5 V DC (Load resistance 550 Ω max.) |
| 66 | 1 - 5 V DC (Load resistance 5000 Ω min.) |
| 4W4W | -10 - +10 V DC (Input resistance 1 MΩ min.) |
  / -10 - +10 V DC (Load resistance 20 kΩ min.)

**[3] POWER INPUT**

**AC Power**

M2: 100 – 240 V AC (Operational voltage range 90 – 264 V, 47 – 66 Hz)
(UL not available)

**DC Power**

R: 24 V DC
(Operational voltage range 24 V ±10 %, ripple 10 %p-p max.)

**[4] OPTIONS (multiple selections)**

**Response Time (0 – 90 %)**

- blank: Standard (≤ 0.5 sec.)
- /K: Fast Response (Approx. 3.5 msec. voltage output; Approx. 25 msec. current output)

**Standards & Approvals**

- blank: CE marking
- /UL: UL approval, CE marking
- Other Options
  - blank: none
  - /Q: Option other than the above (specify the specification)

**SPECIFICATIONS OF OPTION: Q**

**COATING** (For the detail, refer to M-System’s web site.)

- /C01: Silicone coating
- /C02: Polyurethane coating

**GENERAL SPECIFICATIONS**

**Connection**

- Input and output: M3 screw terminal (torque 0.5 N·m)
- Power input: Via the Installation Base (model: M6NBS) (not available for AC power input)
  or M3 screw terminal (torque 0.5 N·m)

**Recommended solderless terminal:** Max. 5.8 mm (0.23") wide; Ones with insulation sleeve do not fit.

**Applicable wire size:** 0.2 – 2.5 mm²

**Housing material:** Flame-resistant resin (black)

**Isolation:** Input to output to power

**Zero adjustment:** -2 to +2 % (front)
  (Output code 4W: Adjustable at 0 V.)

**Span adjustment:** 98 to 102 % (front)

**Power LED:** Green light turns on when the power is supplied.

**Recommended solderless terminal (unit: mm (inch))**

**INPUT SPECIFICATIONS**

- DC Current: Input resistor incorporated

**INSTALLATION**

**Power Consumption**

- AC: Max. 2 VA
**SPECIFICATIONS**

- **DC:** Approx. 0.45 W
- **Operating temperature:** -20 to +55°C (-4 to +131°F)
- **Operating humidity:** 30 to 90 %RH (non-condensing)
- **Mounting:** Installation Base (model: M6NBS) or DIN rail
- **Weight:** 60 g (2.1 oz)

**PERFORMANCE in percentage of span**

- **Accuracy:** ±0.1%
- **Temp. coefficient:** ±0.01%/°C (±0.006%/°F)
- **Line voltage effect:** ±0.1 % over voltage range
- **Insulation resistance:** ≥ 100 MΩ with 500 V DC
- **Dielectric strength:** 2000 V AC @1 minute (input to output to power to ground)

**STANDARDS & APPROVALS**

- **EU conformity:**
  - EMC Directive
  - EMI EN 61000-6-4
  - EMS EN 61000-6-2
- **Low Voltage Directive**
  - EN 61010-1
  - Installation Category II
  - Pollution Degree 2
- **Input or output to power:** Reinforced insulation (300 V)
- **Input to output:** Basic insulation (300 V)
- **RoHS Directive**
  - EN 50581
- **Approval:**
  - UL/C-UL nonincendive Class I, Division 2, Groups A, B, C, and D
  - (ANSI/ISA-12.12.01, CAN/CSA-C22.2 No.213)
  - UL/C-UL general safety requirements
  - (UL 61010-1, CAN/CSA-C22.2 No.61010-1)

**EXTERNAL VIEW**

(With the cover open)
EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)

- **DIN RAIL HOOK**: 102 (4.02) \[1 (.04)]
- **8–M3 SCREW TERMINAL**: 102 (4.02)
- **WIRE INSERTION ANGLE**: approx. 35°
- **SCREWDRIVER INSERTION ANGLE**: approx. 40°
- **DIN RAIL**: 35mm wide

* Screwdriver stem diameter: 6 mm (.24") or less
* When mounting, no extra space is needed between units.

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

- **Input shunt resistor incorporated for current input.**
- **Available only for DC power input type**

⚠ Specifications are subject to change without notice.