Screw Terminal Ultra-Slim Signal Conditioners M6N Series

SIGNAL TRANSMITTER
(high-accuracy, ultra-high speed response 30 μsec.)

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
- 30-microsecond response
- Frequency characteristics 12 kHz (-3 dB)
- High-density mounting
- Power indicator LED

Typical Applications
- Isolation for a vibration analyzing system
- Isolation for Discharge/Charge tester


ORDERING INFORMATION
- Code number: M6NVF-[1]4W-R[2]
  Specify a code from below for each [1] and [2].
  (e.g. M6NVF-04W-R/Q)
- Special input range (For code 0: e.g. -164 – +164 mV DC)
- Specify the specification for option code /Q
  (e.g. /C01)

[1] INPUT
Voltage
- 2W: -100 – +100 mV DC (Input resistance 1 Ω min.)
- 4W: -10 – +10 V DC (Input resistance 1 Ω min.)
- 5W: -5 – +5 V DC (Input resistance 1 Ω min.)
- 8W: -20 – +20 V DC (Input resistance 1 Ω min.)
- 0: Specify voltage
  (Select input range as indicated below. Input resistance 1 Ω min.)
  -20 – +20 mV DC
  -24 – +24 mV DC

[2] OPTIONS
- blank: none
- /Q: With options (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)
  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
- Overrange input: -5 to +105 %
- Zero adjustment: -1 to +1 % (front)
- Span adjustment: 99 to 101 % (front)
- Power LED: Green light turns on when the power is supplied.

Recommended solderless terminal (unit: mm (inch))

MODEL: M6NVF

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M-System Co., Ltd.
http://www.m-system.co.jp/
**INPUT SPECIFICATIONS**

Input resistance: 1 MΩ min. (3 kΩ min. at power loss)

**OUTPUT SPECIFICATIONS**

Parallel load capacitance: Max. 2000 pF

**INSTALLATION**

Power consumption: Approx. 0.6 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: ±0.01 %

Temp. coefficient: ±0.005 %/°C (±0.003 %/°F)

Frequency characteristics: 12 kHz, -3 dB

Response time: ≤ 30 μsec. (0 - 90 %)

Line voltage effect: ±0.01 % 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

RoHS Directive

EN 50581

**EXTERNAL VIEW**

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

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

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

This unit, by its fast-response feature, is not designed to eliminate noise present in the input signal. Use a shielded twisted-pair cable to prevent noise from entering through the input wiring.

⚠️ Specifications are subject to change without notice.