

## M6 Series Ultra-Slim Signal Conditioners

- Only 5.9 mm (0.23 in) wide ultra-slim design for M6D/M6S series
- Selectable connection styles — Tension-clamp, screw terminal or euro terminal
- Low power consumption, high load drive capability
- 2000 Vac isolation
- CE marking and UL Nonincendive approval



M-System's high performance signal conditioners are now packed in ultra-slim housings of only 5.9 mm (0.23 in) at the front face. As many as sixteen M6D/M6S modules can be mounted tightly side by side in a space of 9.5 centimeters (3.75 inches).

Even though the power consumption of these modules is suppressed to the extreme low level, they can drive at the maximum of 550 ohm load with 4-20 mA<sub>dc</sub> output.

Each module is provided with a green power indicator LED to help you diagnose its status. In order to save you from individual power input wiring, the Installation Base holding eight modules can be expanded up to six bases for the maximum of 48 modules supported by a common power supply.

Three connection styles are available: Tension-clamp, screw terminal and euro terminal.

A wide selection of functions are available: fixed range and PC programmable transmitters, DC signal splitters, limit alarms, PC programmable function modules and input loop powered isolators.

Most of these products are for use in the UL and cUL Class I, Division 2, Groups A, B, C, D applications.

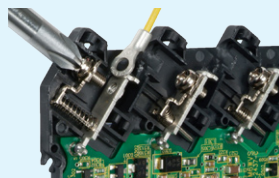
### M6S Series : Tension Clamp Style

5.9 mm (0.23 in) wide module.  
No special tool or skill is required when wiring.



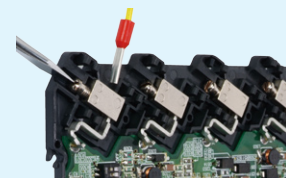
### M6N Series : Screw Terminal Style

7.5 mm (0.30 in) wide module.  
Self-up screws prevent falling off a terminal.

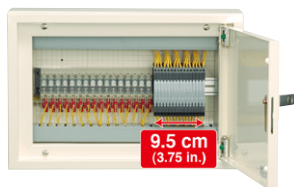


### M6D Series : Euro Terminal Style

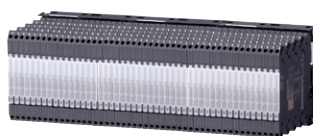
5.9 mm (0.23 in) wide module.  
Suitable for solid wires, pin terminals.



### Ultra-High Density Mounting

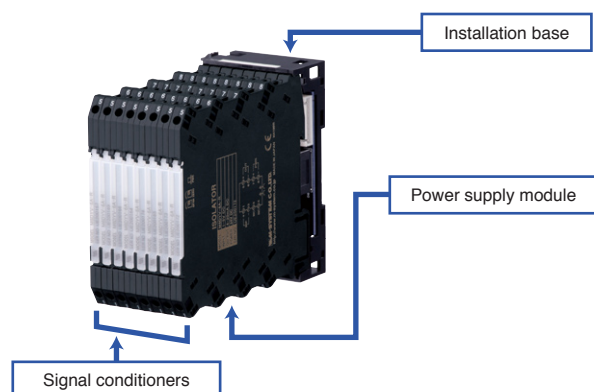


16 modules in a 9.5 cm (3.75 in) wide space (M6S/M6D)



Less than 30 cm (12 in) with 48 modules (M6S/M6D)

### Power Supply through the Backplane Bus



## M6 SERIES SIGNAL CONDITIONERS SELECTION GUIDE

Tension Clamp	M3 Screw Terminal	Euro Terminal	FUNCTIONS	I/O SPECIFICATIONS	CE	UL/cUL
M6SSN-1	M6NSN-1	M6DSN-1	Loop powered isolator	Single channel; 0..4-20 mA input and output	■	■
M6SSN-2	M6NSN-2	M6DSN-2	Loop powered isolator	Dual channel; 0..4-20 mA input and output	■	■
M6SYV	M6NYV	M6DYV	Isolator	4-20 mA / 1-5 V input and output	■	■
M6SXU	M6NXU	M6DXU	Universal transmitter <b>PC</b>	(future plan)	*	*
M6SXV	M6NXV	M6DXV	Signal transmitter <b>PC</b>	DC mV, V and mA input and output; 101-point linearization available	■	■
M6SVS	M6NVS	M6DVS	Fixed range signal transmitter	DC mV, V and mA input and output	■	■
M6SWVS	M6NWVS	M6DWVS	Fixed range signal splitter	DC mV, V and mA input and dual isolated outputs	■	■
M6SXT	M6NXT	M6DXT	Thermocouple transmitter <b>PC</b>	KEJTBRSN input, DC mV, V and mA output; Custom temperature table selectable	■	■
M6SXR	M6NXR	M6DXR	RTD transmitter <b>PC</b>	Pt100, Pt1000, Cu10 input, DC mV, V and mA output; Custom temperature table selectable	■	■
M6SXM	M6NXM	M6DXM	Potentiometer transmitter <b>PC</b>	100-5000 Ω input, DC mV, V and mA output; Custom linearization available	■	■
M6SDY	M6NDY	M6DDY	Current loop supply	24 Vdc excitation supply; 4-20 mA input; 4-20 mA, 0-10 V, 0-5 V, 1-5 V output	■	■
M6SCTC	M6NCTC	M6DCTC	Clamp-on sensor input AC current transmitter	10-600 A input (primary), DC mV, V and mA output	*	---
M6SPA	M6NPA	M6DPA	Frequency transmitter	Open collector, mechanical contact or voltage pulse input, 0-0.01 Hz up to 100 kHz; DC mV, V and mA output	■	■
M6SPP	M6NPP	M6DPP	Pulse isolator	Open collector, mechanical contact or voltage pulse input; open collector or voltage pulse output, Max. 100 kHz	■	*
M6SXAP	M6NXAP	M6DXAP	DC/Frequency converter <b>PC</b>	(future plan)	*	*
M6SXAS	M6NXAS	M6DXAS	DC input limit alarm <b>PC</b>	DC mV, V and mA input; Single SPDT relay output, 250 Vac or 30 Vdc @2 A	■	---
M6SXAT	M6NXAT	M6DXAT	T/C input limit alarm <b>PC</b>	(future plan)	*	---
M6SXAR	M6NXAR	M6DXAR	RTD input limit alarm <b>PC</b>	(future plan)	*	---
M6SXF1	M6NXF1	M6DXF1	Single input function module <b>PC</b>	DC mV, V and mA input and output; Filter/lag, inverted output, linearization, SQRT, X <sup>2</sup> , X <sup>5/2</sup> , X <sup>3/2</sup> , high/low limit	■	■
M6SXF2	M6NXF2	M6DXF2	Dual input function module <b>PC</b>	DC mV, V and mA input and output; Math functions, high/low selection	■	*
M6SXF3	M6NXF3	M6DXF3	Hold function module <b>PC</b>	DC mV, V and mA input and output; Track/Hold, peak hold, valley hold, peak-to-peak hold	■	*
M6SBS	M6NBS	M6DBS	Installation base	8-slot base for backplane power supply; expandable up to 48 slots	■	■
M6SPS1	M6NPS1	M6DPS1	Power supply module	24 Vdc power input; dual redundant power supply system selectable	■	■
M6SPS2	M6NPS2	M6DPS2	Power supply module	24 Vdc power input; dual redundant power supply system selectable	■	■
M6SPSM	M6NPSM	M6DPSM	Power supply module	100-240 Vac power input (future plan)	---	---
M6SDM	M6NDM	M6DDM	Blank filler module		---	---

**PC** PC programmable type (\*) Future plan

## COMMON SPECIFICATIONS

### Isolation:

Input to output (1 to output 2) to power

### Dielectric strength:

2000 Vac @1 minute

### Power input: 24 Vdc ±10%

(100-240 Vac available for M6xYV and M6xVS)

### Operating temperature:

-20 to +55°C (-4 to +131°F)

### Operating humidity:

30 to 90% RH (non-condensing)

### External dimensions:

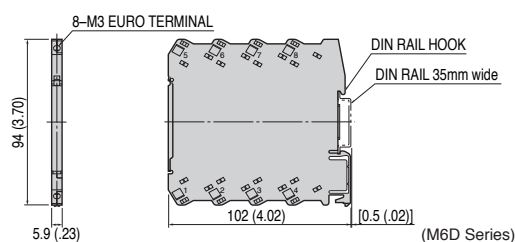
W5.9 x H94 x D102 mm (M6S/M6D)

W0.23" x H3.70" x D4.02" (M6S/M6D)

W7.5 x H102 x D102 mm (M6N)

W0.30" x H4.02" x D4.02" (M6N)

## EXTERNAL DIMENSIONS mm (inch)



Your local representative: