

Space-saving Dual Output Signal Conditioners Mini-MW Series

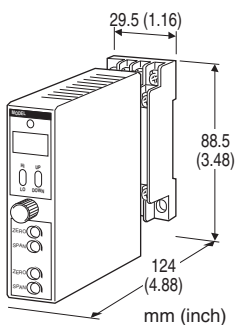
2-OUTPUT PARAMETER GENERATOR

Functions & Features

- Provides a constant DC signal
- Setpoint adjustable from -10.0 to +105 %
- Easy setting with the front digital display

Typical Applications

- Various parameter settings for computers and DCS's



MODEL: W2MST-[1][2]-[3][4]

ORDERING INFORMATION

- Code number: W2MST-[1][2]-[3][4]
- Specify a code from below for each of [1] through [4].
(e.g. W2MST-AA-M2/N/Q)
- Special output range (For codes Z & 0)
- Specify the specification for option code /Q
(e.g. /C01/S01)

Note: When the user requires a current and a voltage output, specify the current to be the Output 1 which allows a greater load.

[1] OUTPUT 1

Current

- A: 4 – 20 mA DC (Load resistance 750 Ω max.)
- B: 2 – 10 mA DC (Load resistance 1500 Ω max.)
- C: 1 – 5 mA DC (Load resistance 3000 Ω max.)
- D: 0 – 20 mA DC (Load resistance 750 Ω max.)
- E: 0 – 16 mA DC (Load resistance 900 Ω max.)
- F: 0 – 10 mA DC (Load resistance 1500 Ω max.)
- G: 0 – 1 mA DC (Load resistance 15 k Ω max.)
- Z: Specify current (See OUTPUT SPECIFICATIONS)

Voltage

- 1: 0 – 10 mV DC (Load resistance 10 k Ω min.)

- 2: 0 – 100 mV DC (Load resistance 100 k Ω min.)
- 3: 0 – 1 V DC (Load resistance 1000 Ω min.)
- 4: 0 – 10 V DC (Load resistance 10 k Ω min.)
- 5: 0 – 5 V DC (Load resistance 5000 Ω min.)
- 6: 1 – 5 V DC (Load resistance 5000 Ω min.)
- 4W: -10 – +10 V DC (Load resistance 10 k Ω min.)
- 5W: -5 – +5 V DC (Load resistance 5000 Ω min.)
- 0: Specify voltage (See OUTPUT SPECIFICATIONS)

[2] OUTPUT 2

Y: None

Current

A: 4 – 20 mA DC (Load resistance 350 Ω max.)

Voltage

6: 1 – 5 V DC (Load resistance 5000 Ω min.)

[3] POWER INPUT

AC Power

M2: 100 – 240 V AC (Operational voltage range 85 – 264 V, 47 – 66 Hz)

DC Power

R: 24 V DC

(Operational voltage range 24 V $\pm$ 10 %, ripple 10 %p-p max.)

R2: 11 – 27 V DC

(Operational voltage range 11 – 27 V, ripple 10 %p-p max.)

P: 110 V DC

(Operational voltage range 85 – 150 V, ripple 10 %p-p max.)

[4] OPTIONS (multiple selections)

Standards & Approvals (must be specified)

/N: Without CE

Other Options

blank: none

/Q: Option other than the above (specify the specification)

SPECIFICATIONS OF OPTION: Q (multiple selections)

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

/C01: Silicone coating

/C02: Polyurethane coating

/C03: Rubber coating

TERMINAL SCREW MATERIAL

/S01: Stainless steel

GENERAL SPECIFICATIONS

Construction: Plug-in

Connection: M3 screw terminals (torque 0.8 N·m)

Screw terminal: Chromated steel (standard) or stainless steel

Housing material: Flame-resistant resin (black)

Isolation: Output 1 to output 2 to power

Overrange output: Approx. -10 to +105 % (within 0 to 20 mA DC, -10 to +12 V DC)

Zero adjustment: -5 to +5 % (front)

Span adjustment: 95 to 105 % (front)

Adjustable individually for each output 1 and output 2.

Setpoint adjustment: -10.0 – +105 %;

0.1 % increments (1 % increments over 100 %)

Display selector: Double-throw SW (front)

UP/DOWN control: Double-throw, momentary SW (front)

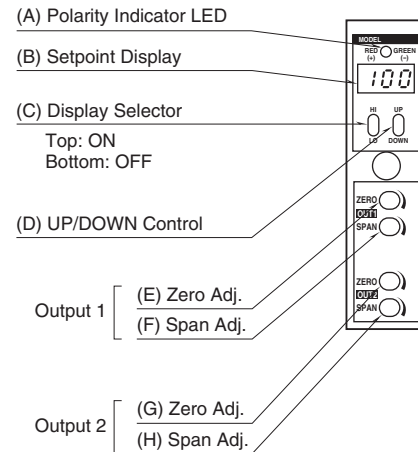
■ INDICATORS

Setpoint display: Red LED; 6.4 mm (.25") 7 segment, 3 digits

Polarity indicator: Dual color (red/green) LED; Red with a positive set value; Green with a negative set value.

Power saving mode: Indicators turn off when the switches are left untouched for 1 minute, or when the display selector is set to the bottom position.

EXTERNAL VIEW



• How to Set an Output

Turn the Display Selector (C) to the top position.

The Setpoint Display (B) shows the current setpoint (-10.0 – +105 %). Press UP/DOWN Control (D) until the display shows a desired set value.

The Polarity Indicator LED (A) is red when the set value is in positive range, green when in negative range.

OUTPUT SPECIFICATIONS

■ **DC Current:** 0 – 20 mA DC

Minimum span: 1 mA

Offset: Max. 1.5 times span

Load resistance: Output drive 15 V max.

■ **DC Voltage:** -10 – +12 V DC

Minimum span: 5 mV

Offset: Max. 1.5 times span

Load resistance: Output drive 1 mA max.; at ≥ 0.5 V

INSTALLATION

Power Consumption

•AC:

Approx. 4 VA at 100 V

Approx. 5 VA at 200 V

Approx. 6 VA at 264 V

•DC: Approx. 3 W

Operating temperature: -5 to +55°C (23 to 131°F)

Operating humidity: 30 to 90 %RH (non-condensing)

Mounting: Surface or DIN rail

Weight: 150 g (0.33 lb)

PERFORMANCE in percentage of span

Setting accuracy: ± 0.1 %

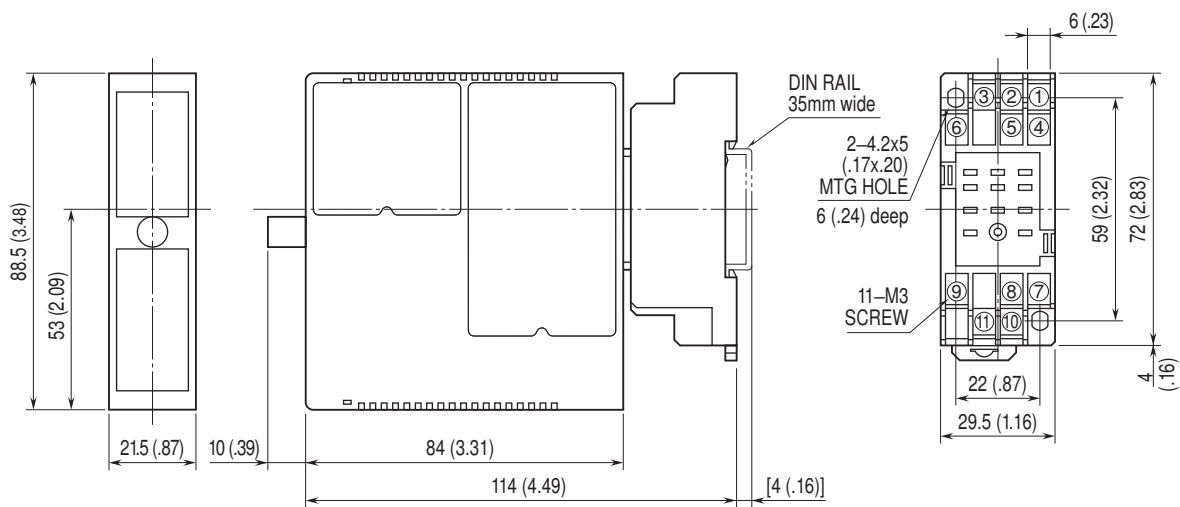
Temp. coefficient: ± 0.015 %/°C (± 0.008 %/°F)

Line voltage effect: ± 0.1 % over voltage range

Insulation resistance: ≥ 100 M Ω with 500 V DC

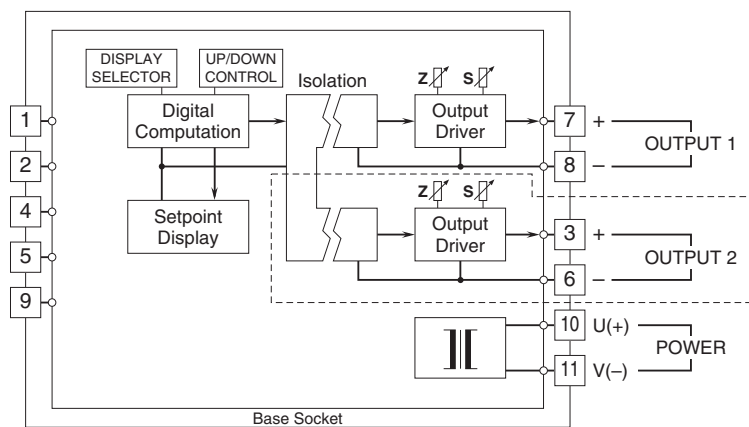
Dielectric strength: 2000 V AC @1 minute (output 1 to output 2 to power to ground)

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



• When mounting, no extra space is needed between units.

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Note: The section enclosed by broken line is only with 2nd output option.



Specifications are subject to change without notice.