

## Space-saving Dual Output Signal Conditioners Mini-MW Series

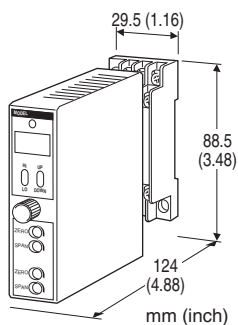
### 2-OUTPUT PARAMETER GENERATOR

#### 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  $\Omega$  max.)
- B:** 2 - 10 mA DC (Load resistance 1500  $\Omega$  max.)
- C:** 1 - 5 mA DC (Load resistance 3000  $\Omega$  max.)
- D:** 0 - 20 mA DC (Load resistance 750  $\Omega$  max.)
- E:** 0 - 16 mA DC (Load resistance 900  $\Omega$  max.)
- F:** 0 - 10 mA DC (Load resistance 1500  $\Omega$  max.)
- G:** 0 - 1 mA DC (Load resistance 15 k $\Omega$  max.)
- Z:** Specify current (See OUTPUT SPECIFICATIONS)

Voltage

- 1:** 0 - 10 mV DC (Load resistance 10 k $\Omega$  min.)

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

#### [2] OUTPUT 2

Y: None

Current

- A:** 4 - 20 mA DC (Load resistance 350  $\Omega$  max.)

Voltage

- 6:** 1 - 5 V DC (Load resistance 5000  $\Omega$  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 our 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.

## 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  $\geq 0.5$  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:**  $\pm 0.1$  %

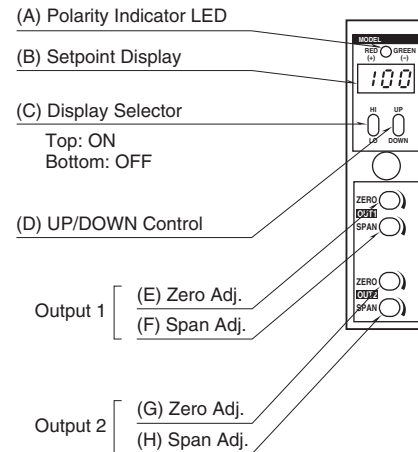
**Temp. coefficient:**  $\pm 0.015$  %/°C ( $\pm 0.008$  %/°F)

**Line voltage effect:**  $\pm 0.1$  % over voltage range

**Insulation resistance:**  $\geq 100$  M $\Omega$  with 500 V DC

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

## EXTERNAL VIEW



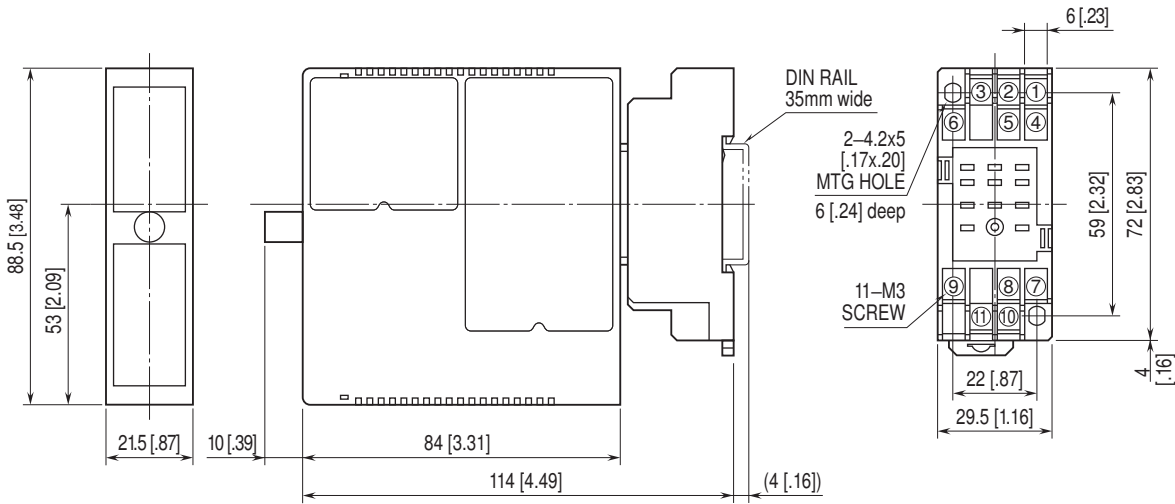
### • How to Set an Output

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.

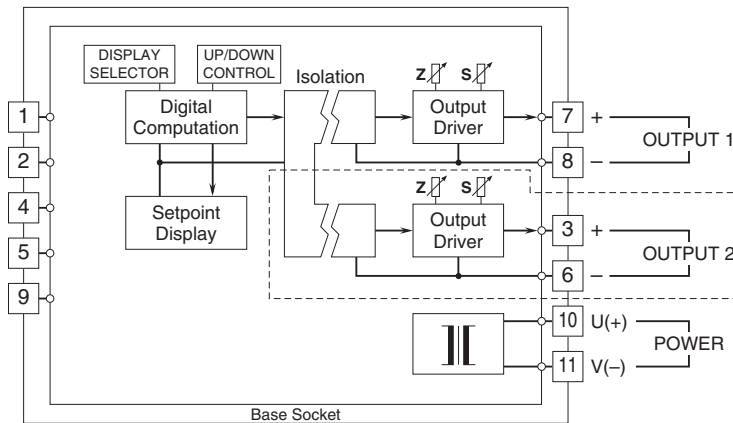
The Polarity Indicator LED (A) is red when the set value is in positive range, green when in negative range.

**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.