**Autonics**

**DIGITAL PANEL METER**

**M5W SERIES**

**MANUAL**

Thank you very much for selecting Autonics products.

For your safety, please read the following before using this unit.

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**Caution for your safety**

- Please keep these instructions and review them before using this unit.
- Please observe the cautions that follow:
- **Warning** Serious injury may result if instructions are not followed.
- **Caution** Product may be damaged, or injury may result if instructions are not followed.
- The following is an explanation of the symbols used in the operation manual:
  - **CAUTION** Injury or damage may occur under special conditions.

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**Caution**

1. In case of using this unit with machineries (Nuclear power control, medical equipment, vehicle, train, airplane, combustion apparatus, entertainment or safety devices), it is required installing safety devices, or contact your nearest office for information on type required.
   - It may result in serious damage, fire or human injury.
2. It must be mounted on panel. It may give an electric shock.
3. Do not repair or check up when power on. It may give an electric shock.
4. Please check the number of terminal when connect power line or measuring input. It may cause a fire.

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**Warning**

1. This unit shall not be used outdoors. It may shorten the life cycle of the product or give an electric shock.
2. When wire connection for power input and measuring input, the tightening strength for screw bolt on terminal block should be over than 0.74N·m - 0.98N·m. It may result in malfunction or fire due to contact failure.
3. Please observe specification rating. It may shorten the life cycle of the product and cause a fire.
4. In cleaning the unit, do not use water or an oil-based detergent. It may cause an electric shock or fire that will result in damage to the product.
5. Do not use this unit at place where there are flammable or explosive gas, humidity, direct ray the sun, radiant heat, vibration, impact etc. It may cause explosion.
6. Do not inflow dust or wire drops into inside of this unit. It may cause a fire or mechanical trouble.
7. Please connect properly after checking the polarity of measurings terminals. It may cause a fire or explosion.

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**Dimension**

- Panel cut-out: 98 x 96 x 111.6
- Min: 52 x 35 x 92 (Unit:mm)

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**Specification**

- **Model**: M5W-**AY**, M5W-**AV**, M5W-**AW**
- **Max. Input**: 360VAC, 540VDC
- **Max. Current**: 360 A
- **Input Range**: ±19999, ±19999 (mV input)
- **Output Range**: 0 to 10 VDC, 0 to 5 VDC
- **Display**: LED, 3 digits
- **Power Consumption**: 4VDC
- **Accuracy**: ±0.5% of full scale ±1 digit
- **Display Resolution**: 200µA, 50mA
- **Temperature Range**: -20°C to 55°C
- **Humidity**: 0 to 90%

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**Ordering information**

<table>
<thead>
<tr>
<th>Model</th>
<th>Main Function</th>
<th>Meter</th>
<th>DC Type</th>
<th>Amplifier</th>
<th>Wall Meter</th>
<th>Line Speed Meter</th>
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<td>4-20mA</td>
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**Measuring range**

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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<td>800.5V</td>
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<tr>
<td>B</td>
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</tbody>
</table>

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**Connection**

- **Input**: AC Power, Ampere Meter, Volt Meter
- **Output**: 0 to 5 VDC, 0 to 10 VDC

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**Ordering**

- **Model**: M5W-**AY**, M5W-**AV**, M5W-**AW**
- **Input**: 0 to 5 VDC, 0 to 10 VDC
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**Using line filter**

1. Install inside from DPM to 110/220VAC
2. Connect using Variator
3. Using shield with one wire

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**Main products**

- **COUNTER**
- **WIRE**
- **TEMPERATURE CONTROLLER**
- **PANEL METER**
- **TACH/LINE SPEED/PLUSE METER**
- **DISPLAY UNIT**
- **PROXIMITY SENSOR**
- **PRODUCT SENSOR**
- **FIBER OPTIC SENSOR**
- **PRESSURE SENSOR**
- **ROTARY ENCODER**
- **SENSOR CONTROLLER**
- **POWER CONTROLLER**
- **STEPPING MOTOR & DRIVER & CONTROLLER**
- **LASER MARKING SYSTEM**

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**Caution for using**

1. **Installation environment**
   - I3 shall be used/indoor
   - I3A shall be Max. 200m
   - Pollution Degree D2
   - Installation Category II
2. Please use the terminal(M3.5, Max. 7.3mm) when connect the AC power source.
3. Please use separated line from high voltage line or power line in order to avoid inductive noise.
4. Please install power switch or circuit breaker in order to cut out the power supply.
5. The switch or circuit breaker should be installed near by users for safety.
6. Be sure to use the 25m of this unit near by machinery makes strong high frequency noise.
   - (Welding machine, high capacity SCR unit etc.)
7. When input applied, i.e. “19999” or “19999” are displayed, it has some trouble with measuring input. please check the line after power off.
8. Noise inflow from power line can be serious problem for products driving of DPM by AC power.
   - Even though there is condenser for protecting noise between lines in power transformer, but this display unit as small unit, it is very difficult to install protection components. Therefore, please install line filter, variator or noise absorber in external lines when voltage failure occurred by power relay or magnetic S/W operation, spark with high voltage.

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**Autonics Corporation**

**http://www.autonics.com**

**Satisfactory Partner For Factory Automation**

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