EMGZ 307 Series Tension Measuring Amplifier

**IP67 aluminium housing**
Can be used in harsh environments

**No programming required**
Easy to setup

**Standardised analog outputs**
Multiconnectable with PLC, Display etc.

**Galvanically isolated**
Protected against electrical noise

**Utilises SMT Hybrid Technology**
Durability, Stability, and Upgradability

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**Functional Description**

The EMGZ 307 Series is a single channel analog Tension Measuring Amplifier based on a hybrid circuit. There can be 1 or 2 force sensors connected. All settings are done with 10-turn trimmers which are easily accessible. Additional jumpers allow the system to operate with fixed gain and offset (when operating with PLC or PC). For filtering the output signals, capacitors can be added. The IP67 aluminium housing is designed specifically for use in harsh conditions.

www.fms-technology.com
**EMGZ 307 Series • Technical data**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensor supply voltage</td>
<td>5 VDC ± 11 ppm/°F (± 20 ppm/K) max. 30 mA</td>
</tr>
<tr>
<td>Offset range</td>
<td>± 9 mV</td>
</tr>
<tr>
<td>Gain factor range</td>
<td>500...5000 or fixed</td>
</tr>
<tr>
<td>Linearity error</td>
<td>&lt; 0.1 %</td>
</tr>
<tr>
<td>Temperature drift offset</td>
<td>&lt; 28 ppm/°F (50 ppm/K)</td>
</tr>
<tr>
<td>Tension output</td>
<td>± 10 V min. 1000 Ω</td>
</tr>
<tr>
<td>Current output</td>
<td>0/4...20 mA max. 500 Ω</td>
</tr>
<tr>
<td>Lowpass cut-off frequency</td>
<td>adjustable, ca. 1...1000 Hz</td>
</tr>
<tr>
<td>Power supply</td>
<td>24 VDC (18...36 VDC) max. 0.1 A, galvanically isolated</td>
</tr>
<tr>
<td>Power consumption</td>
<td>max. 2.5 W</td>
</tr>
<tr>
<td>Temperature range</td>
<td>14...140 °F (–10...+60 °C)</td>
</tr>
<tr>
<td>Protection class</td>
<td>IP67</td>
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</tbody>
</table>

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