

FMS Tension Control / Measuring Amplifiers

EMGZ310.ComACT-Series Digital tension measuring amplifier with optional operation via FMS ComACT™ App

- **Free FMS-ComACT app**
Comfortable configuration and display via smartphone / tablet
- **3 key operation with LCD, simple procedures for offset and calibration**
Simple operation, quick configuration
- **Detachable terminal blocks, standardized current and power outputs**
Simple start-up and integration
- **Individual installation options**
DIN-rail mount or IP65 version for field installation



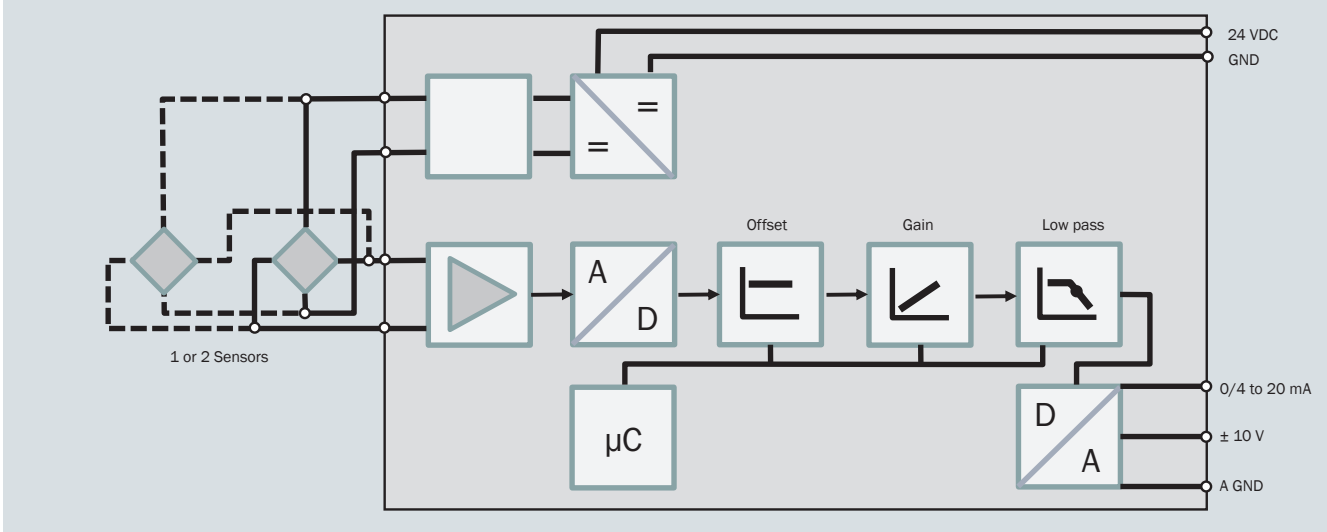
EMGZ310.ComACT-Series

The EMGZ310.ComACT is a compact, digital strain gauge amplifier. It is designed for applications that involve the measurement or control of web tension in coating, laminating, printing, extrusion, or other similar roll to roll processes. The quick and flexible device configuration is straightforward with the extensive range of parameters being set using either the free FMS-ComACT app and any smartphone / tablet or the three easily accessible keys and the integrated LCD. In addition to the remote control and display functions, the FMS-ComACT app offers other useful features such as data logging (and export), saving the configuration settings and indication of the sensor feedback signal.

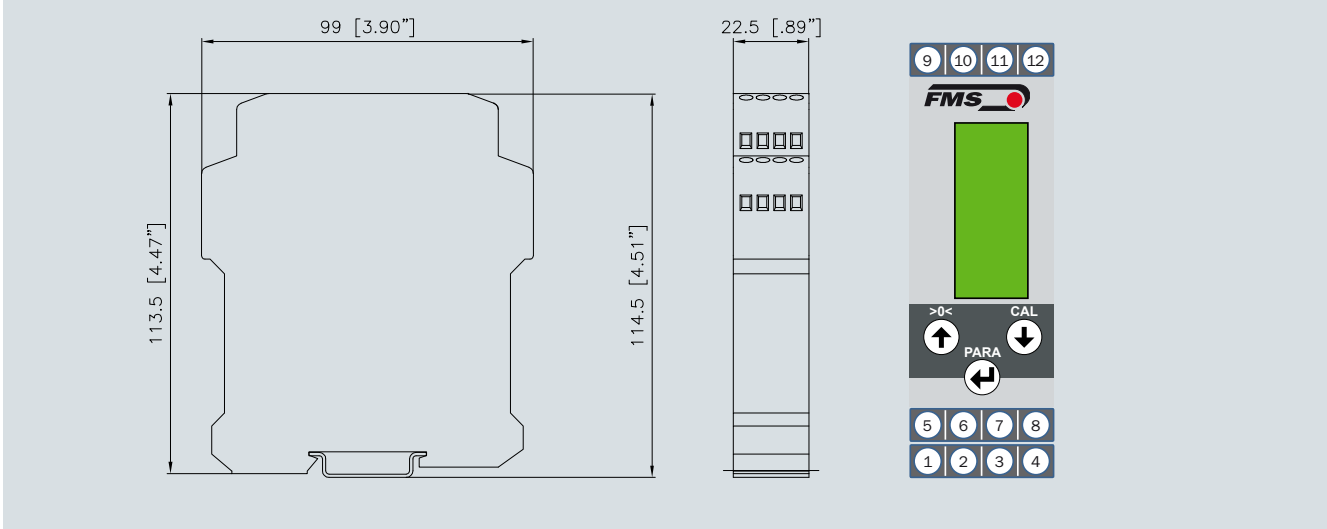
Functional description

The mV signal generated by the force sensors is amplified and fed directly to a high-resolution A/D-converter. Both Voltage and Current outputs are provided as standard. Functions like signal filtering, automatic offset compensation, and gain calculation are all part of the versatility of the EMGZ310.ComACT Series digital amplifier.

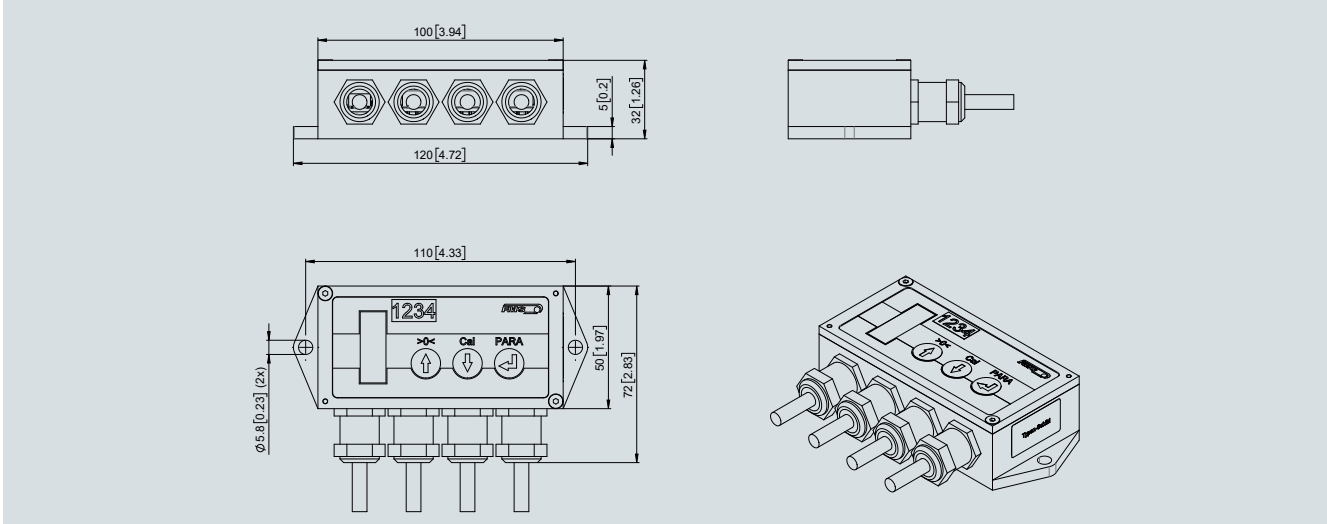
EMGZ310.ComACT-Series : Block diagram



EMGZ310.R.ComACT-Series



EMGZ310.W.ComACT-Series housing for wall mount, IP65 : Dimensions mm (.in)



| EMGZ310.ComACT-Series | |
|--------------------------------------|---|
| Number of channels | 1 channel for 2 sensors |
| Cycle time | 1 ms |
| Power supply for force sensor | 5 VDC, highly stable |
| Sensor feedback signal | ± 9 mV (max. 11.25 mV); with option .V05 ± 2.5 mV |
| Voltage output | ± 10 VDC, min. 1000 Ω, 12 bit |
| Current output | 0/4 to 20 mA, max. 500 Ω, 12 bit |
| Resolution A/D converter | ± 10000 Digit (14 Bit) |
| Measuring error | < 0.05 % FS |
| Configuration | via FMS-ComACT app or 3 keys, 4-digit LCD |
| Protection class | .R housing IP20; .W housing IP65 |
| Power supply | 24 VDC (18 to 36 VDC) |
| Power consumption | 3 W |
| Temperature range | -10 to +50 °C (14 to 122 °F) |
| Weight | 370 g (0.82 lbs) |

| EMGZ310.ComACT-Series : Order Code | |
|---|----------------------------------|
| EMGZ310 | Series |
| .R | Housing for DIN-rail mount |
| .V05 | Sensor feedback signal ± 2.5 mV |
| .ComACT | Communication via FMS-ComACT app |

| EMGZ310.ComACT-Series : Options | |
|--|--|
| .R | housing for DIN-rail mount |
| .W | housing for wall mount |
| .V05 | sensor feedback signal ± 2.5 mV (max. ± 3.125 mV) for force sensors with a sensitivity of 0.5 mV/V |

| EMGZ310.ComACT-Series : Scope of supply | |
|--|---------------------|
| ● | Measuring amplifier |



Other products : Tension Control

| Force Sensors | Tension Controllers | ATEX |
|---|---|---|
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About us

FMS Force Measuring Systems AG is the market leader in the field of web tension measurement, control and specialist for web guiding solutions. For the wire industry we are the only manufacturer offering a complete range of technologies for force measurement, data processing and radio transmission of signals. Our in house developed products are used in the manufacturing industry, converting, metals, paper, textiles, as well as in cable and wire rope production. Utilising the latest technology, high quality components and a firm understanding of customer applications, FMS supports customers worldwide in the effort to maximize the productivity of their machines. Since 1993, our highly qualified employees have been creating high-end solutions for machine builders and plant operators. As an owner-managed company, we pride ourselves on being personal and approachable with the ability to make decisive moves fast.

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