

EMGZ 310 Series Tension Measuring Amplifier

Digital microprocessor controlled
High performance at fastest speeds

3-key operation with alpha-numeric LCD
Easily readable, concise display

Buttons for fast calibration and offset compensation
Easy to setup and operate

Standardised analogue outputs
Connectivity with most industrial PLCs



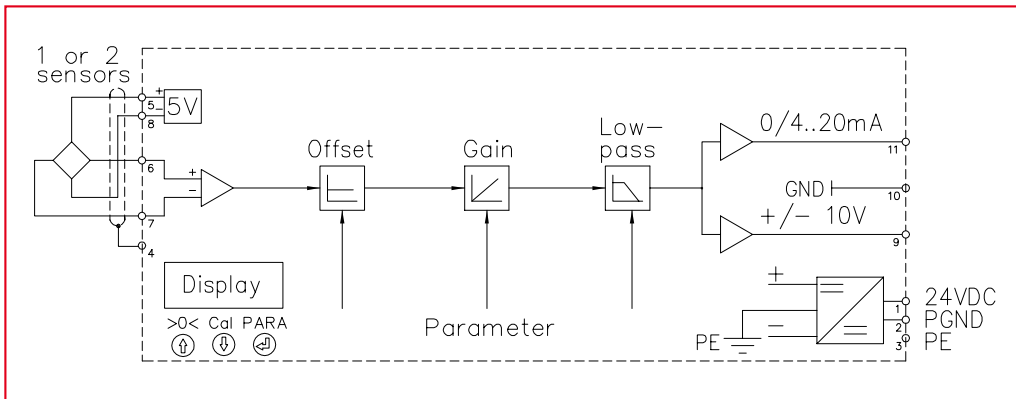
- **EMGZ 310 Series**

The digital tension measuring amplifiers of the EMGZ 310 Series are suitable for tension measurement with all FMS force sensors. This versatile product includes latest technology and can replace the previous generation of analogue pot adjustment units. Setup is straightforward. All parameters are via three easily accessible keys. Parameter setting and value reading is extremely efficient with the alpha-numeric display.

- **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 EMGZ 310 Series digital amplifier.

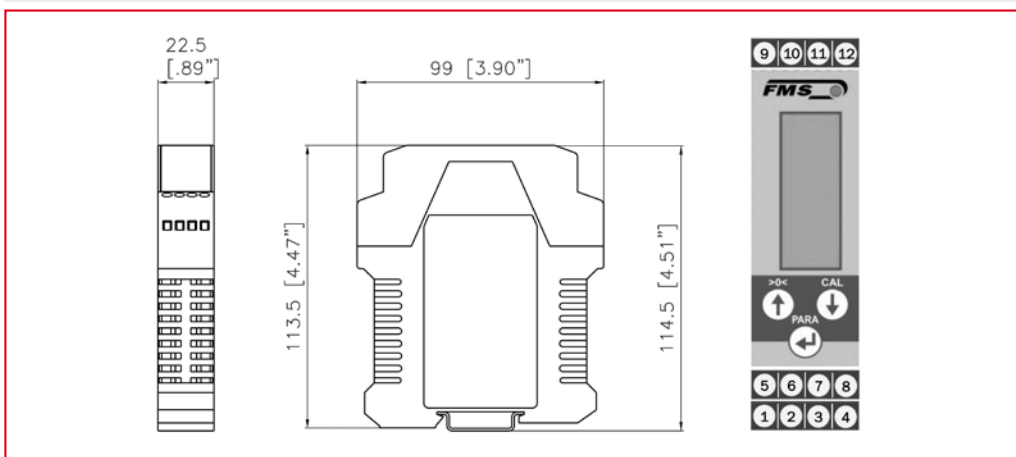
EMGZ 310 Series • Block diagram



EMGZ 310 Series • Technical Data

Number of channels	1 channel for 1 or 2 sensors @ 350 Ω
Sensor excitation	5 VDC; max. 30 mA; high precision
Linearity error	< 0.1%
Processor cycle time	1 ms
Operation / parameter setting	3 keys, 4-digit LCD display (alpha-numeric)
Resolution A/D converter	± 8192 digit (14 bit)
Voltage output	± 10 V; min. 1.0 k Ω (12 bit)
Current output	0/4...20 mA; max. 500 Ω (12 bit)
Power supply	24 VDC (18...36 VDC); max. 0.2 A
Power consumption	max. 3.0 W
Temperature range	0...+50 °C (32...122 °F)
Protection class	IP 20
Special functions	Buttons for calibration and offset compensation

EMGZ 310 Series DIN Rail Mount Housing • Dimensions in mm or [inch]



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