

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

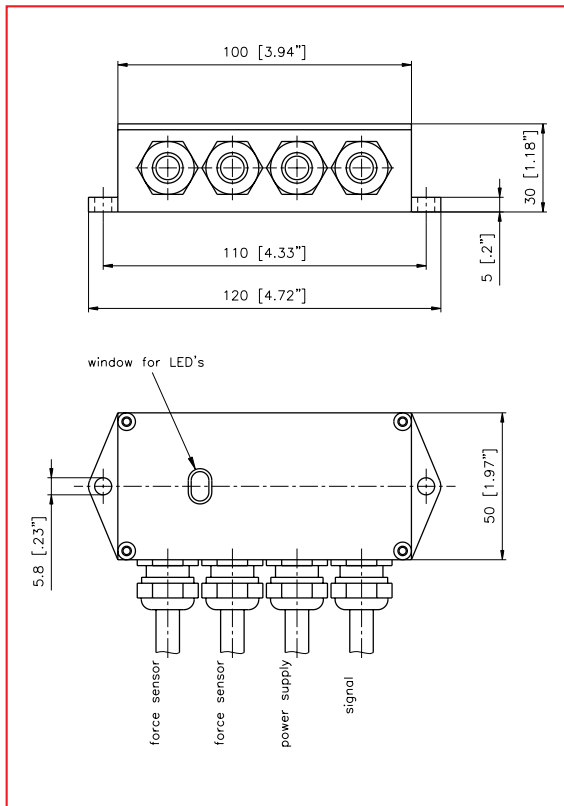
Durability, Stability, and Upgradability



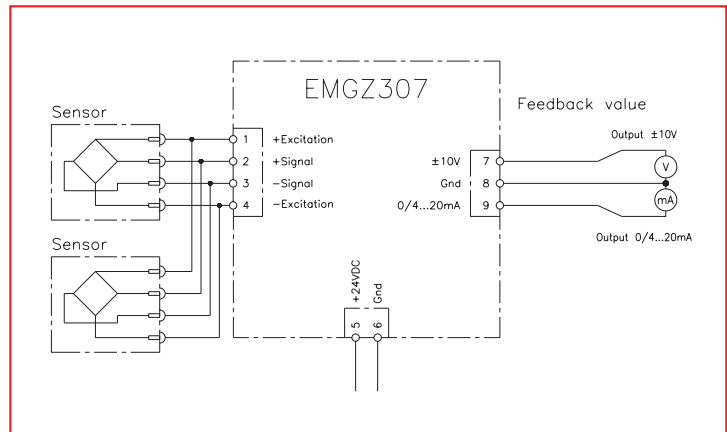
● **Functional Description**

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 IP 67 aluminium housing is designed specifically for use in harsh conditions.

EMGZ 307 Series • Dimensions in mm [inch]



EMGZ 307 Series • Wiring diagram



EMGZ 307 Series • Technical data

Sensor supply voltage	5 VDC \pm 11 ppm/ $^{\circ}$ F [\pm 20 ppm/K] max. 30 mA
Offset range	\pm 9 mV
Gain factor range	500...5000 or fixed
Linearity error	< 0.1 %
Temperature drift offset	< 28 ppm/ $^{\circ}$ F [50 ppm/K]
Tension output	\pm 10 V min. 1000 Ω
Current output	0/4...20 mA max. 500 Ω
Lowpass cut-off frequency	adjustable, ca. 1...1000 Hz
Power supply	24 VDC (18...36 VDC) max. 0.1 A, galvanically isolated
Power consumption	max. 2.5 W
Temperature range	14...140 $^{\circ}$ F [- 10...+60 $^{\circ}$ C]
Protection class	IP 67

World Headquarters:

FMS Force Measuring Systems AG
 Aspstrasse 6
 8154 Oberglatt (Switzerland)
 Tel. ++ 41 1 852 80 80
 Fax ++ 41 1 850 60 06
 info@fms-technology.com

FMS USA, Inc.
 925 East Rand Road · Suite 207
 Arlington Heights, IL 60004
 Phone 847 392 7872
 Fax 847 392 7873
 fmsusa@fms-technology.com

FMS UK
 Highfield, Atch Lench Road
 Church Lench
 Evesham WR 11 4UG
 Phone ++ 44 1386 871023
 Fax ++ 44 1386 871021
 fmsuk@fms-technology.com

www.fms-technology.com