

Measuring amplifier GSV-6L

Item number: 5894



Highlights

- 1-channel measuring amplifier with analog output
- Automatic configuration of the characteristic curve via TEDS
- Functions tare, scale, gain, offset, threshold value
- Data frequency configurable from 1 S/s to 25 kS/s

The GSV-6L measuring amplifier complements the GSV-6CPU with a configurable analog output.

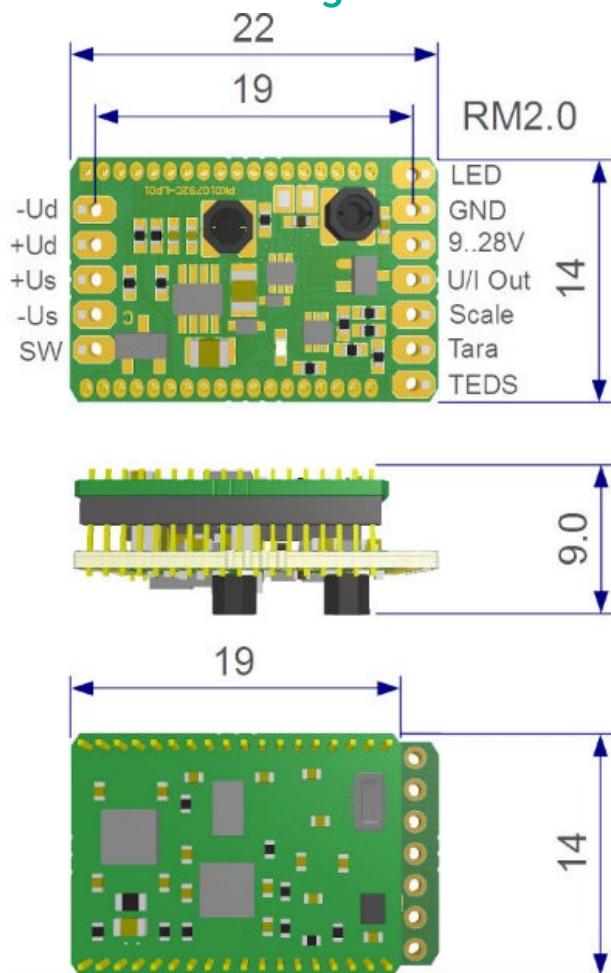
The GSV-6L is designed for integration into sensors and into housings with the smallest possible dimensions, such as connector housings, type "GSV-6K".

Even after encapsulation, all properties of the GSV-6L can be fully configured via two control lines "Tara" and "Scale".

The calibration data from the sensor's electronic data sheet is automatically adopted via a TEDS input.

The analog output is then automatically adjusted to the gradient stored in the TEDS.

Technical Drawing



Technical Data

Basic Data		Unit
Dimensions	22 x 14 x 9	mm ³
Housing	Circuit board	
Connection	Soldering connection	
Number of channels	1-channel	
Schnittstelle	±10V, ±5V, 0...5V, 4...20mA, 0...20mA, ...	
Functions	TEDS, Tara, Scale, Gain, Offset, Frequency, Threshold, Max	
bandbreite	10 S/s ... 25kS/s	

Input analog		Unit
Number of analog inputs	1	
input sensitivity-stepsless from	0.1	mV/V
input sensitivity-stepsless to	8	mV/V

Output analog		Unit
Voltage output from	-10	V
Voltage output to	10	V
Output resistance - voltage output	0.12	Ohm
Current output from	0	mA
Current output to	20	mA

Accuracy data		Unit
Accuracy class	0,1%	
Temperature effect on the zero point	0.05	%FS/10°C
Temperature effect on the measuring sensitivity	0.01	%RD/10°C
Resolution	16	Bit

Measuring frequency		Unit
Data frequency from	10	Hz
Data frequency to	25000	Hz
Sampling frequency	50	kHz
Supply		Unit
Supply voltage from	9	V
Supply voltage to	29	V
Current consumption from	22	mA
Strain gauge bridge supply	3	V
Interface		Unit
Zero Adjustment		Unit
Tolerance	0.1	%FS
Time period	1	ms
Debouncing time	1	s
Trigger level from	9	V
Trigger level to	28	V
Trigger edge	rising	

Environmental Data		Unit
Rated temperature range from	-10	°C
Rated temperature range to	70	°C
Operating temperature range from	-25	°C
Operating temperature range to	85	°C
Environmental protection	IP00/IP66	
MTTFd	92,7	Jahre
PFHd	1,25 * 10E-6	
PerformanceLevel		C

Operating instructions

Note on the bridge circuit: The allowable range for + Ud and -Ud is 1.32V to 1.68V. The maximum, unbalanced series resistor (one-sided series resistance in + Us or -Us) must not exceed 26% of the bridge resistance.

The table lists the maximum possible series resistors, which may be unilaterally connected in + Us or -Us.

Strain Gauge bridge circuit	Max. Series resistor unbalanced
350 Ohms	91 Ohms
700 Ohms	182 Ohms
1000 Ohms	260 Ohms
1400 Ohms	364 Ohms

Mounting