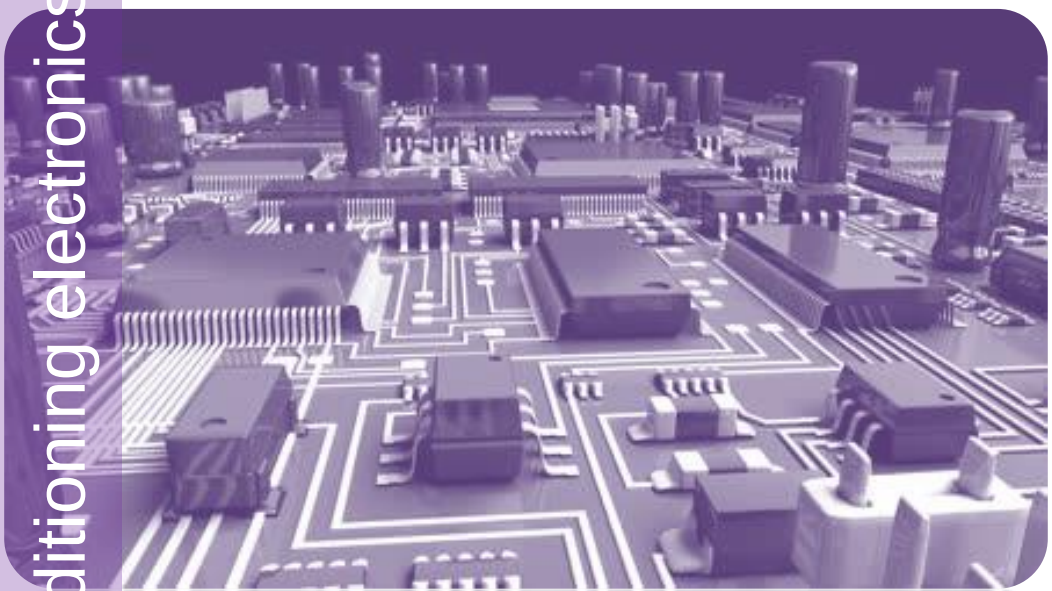
servosis

Testing Machines

Signal conditioning electronics



- Specific software.
- Products under Standard.
- Custom designs.

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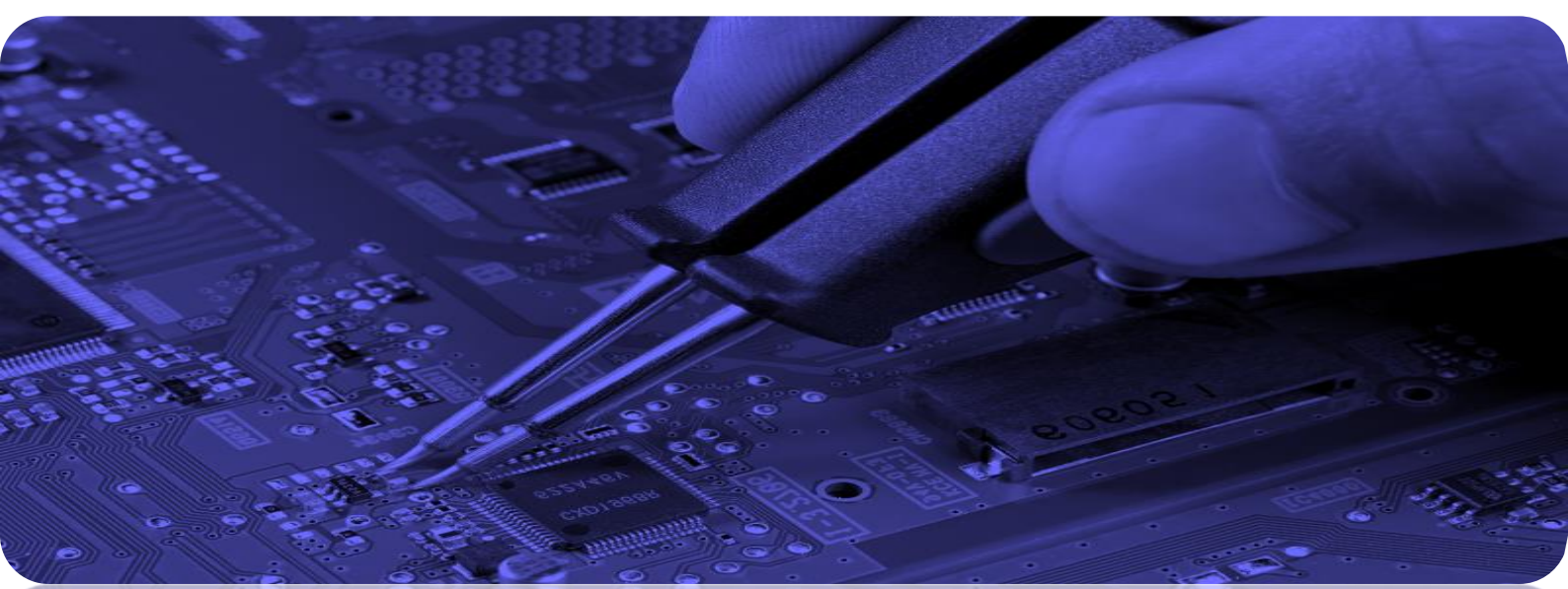
SIGNAL CONDITIONING ELECTRONICS

Experience
Servosis has a vast experience in the testing world for pieces and materials. More than three decades working support us as a benchmark in the sector.

Our range of products include all fields: aeronautic, automotive, construction, lumber, composites, railway…

Innovation
We are in contact with the main manufacturers and research institutes of the sector, in order to be able to offer updated products adapted to the most recent regulations.

Custom-made
Our competitive advantage is our ability to offer custom solutions, according to the specific needs for each of our customers.



SV 106

Designed for sensors or transducers measure, based on resistive strain gages on Wheatstone bridge.

Input circuit based on an Instrumentation Amplifier (INA) with:
- Low noise (1nV/ÖHz) .
- Low THD+N: 0.0009% a 1kHz, G = 100 (Total harmonic distortion plus noise).
- High GBW: 100MHz at G = 1000 (Gain Bandwidth product).
- High CMRR: >100dB (Common-Mode Rejection Ratio).

Gain selection for input Instrumentation Amplifier (INA) through micro switches, in steps of:
G= 100, G=200, G=300, G=400 o G=configurable through high stability resistance.
Offset adjustment.
Voltage input for external zero adjustment.

The conditioner has 2 scales, x1 and x10. Each one has independent gain adjustment and zero adjustment. The selection of the scale is made by an external voltage that switches a relay with double contacts, so that maximum galvanic isolation and independence between two gain amplifiers are ensured.
.
The conditioner output is standard voltage ±10 V.

It has a force alarm circuit. This alarm compares the sensor output signal with an internally adjustable value or an external voltage value.
The alarm working causes a relay activation. It has NC contacts (Normally closed) and NO contacts (Normally open)
The relay remains locked, even if the alarm cause disappears. The alarm can be reset by pushing a button.

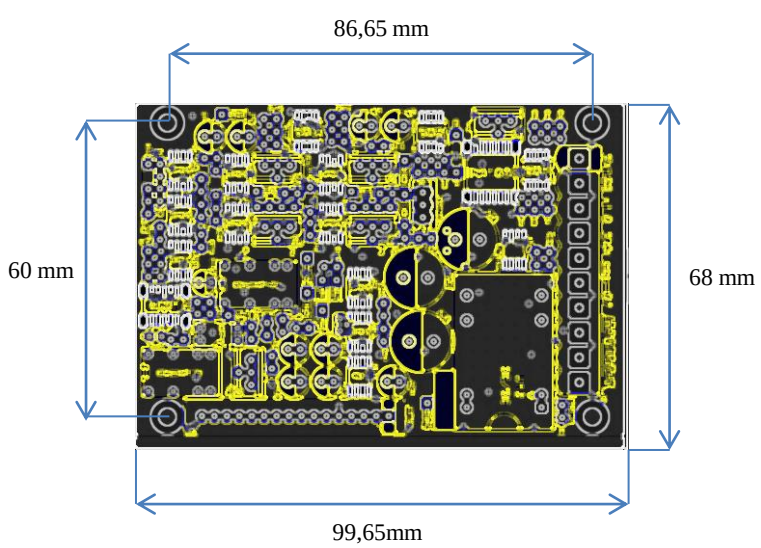
The conditioner just need 24 VDC supply voltage.

Manufactured with most of components in SMD assembly, with a great reliability, thermal stability and security, and a large number of elements and functions, such as filters and operational circuits

It has many Test Points (TPs) to make easier adaptation and adjustments with the load cell.

	SV 106	SV 111
Supply voltage	24 VDC +/- 15 VDC (optional)	
Output analog signal	+/- 10 VDC	
Double measure scale	YES 2nd adjustable scale 1/5,1/10	N.A.
Maximum load alarm signal:	YES. External adjustment optional	N.A,.
External zero value adjustment	Optional	
Dimensions	99,65 x 68 mm	
Assembly system	4 screws + turret M3 Plastic support for DIN rail mounting (optional)	

CON 1	
1	INPUT +
2	INPUT -
3	EXC +
4	EXC -
5	Ref.
6	+ Vout
7	- Vout
8	0V IN
9	24VDC IN
10	



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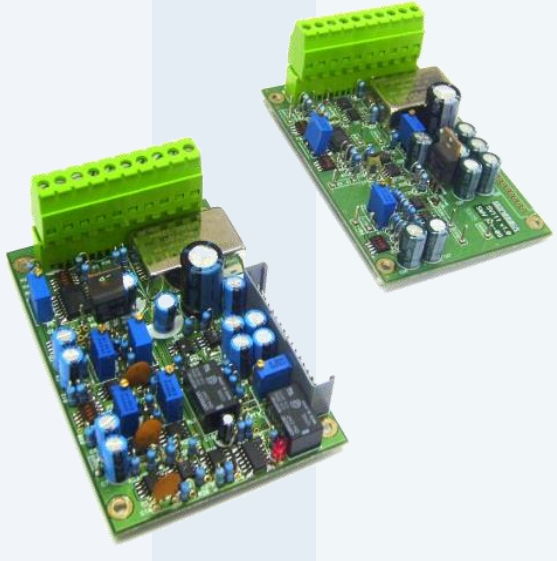
SV 107

SIGNAL CONDITIONERS FOR LVDT AND DISPLACEMENT TRANSDUCERS

Features:

- ❑ Selection from LVDTs, Half-bridge and Full-Bridge.
- ❑ Selection of exciting voltage between 2,5 and 5,0 V.
- ❑ Selection of exicing frequency between 3,7 kHz and 5,1 kHz.
- ❑ Selectrion of filter from 10 kHz, 1kHz and 100Hz.
- ❑ Possibility of variation of input circuit gain through high satability resistance.
- ❑ Gain stage with independent gain and zero settings.
- ❑ External voltage input for zero adjustment.
- ❑ Voltage output signal according to the industrial standard of ±10 V.
- ❑ Supply: 24 VDC
- ❑ Dimensions: 68 x 100 mm, being possible to mount it on a DIN rail or to fix it using M3 screw.



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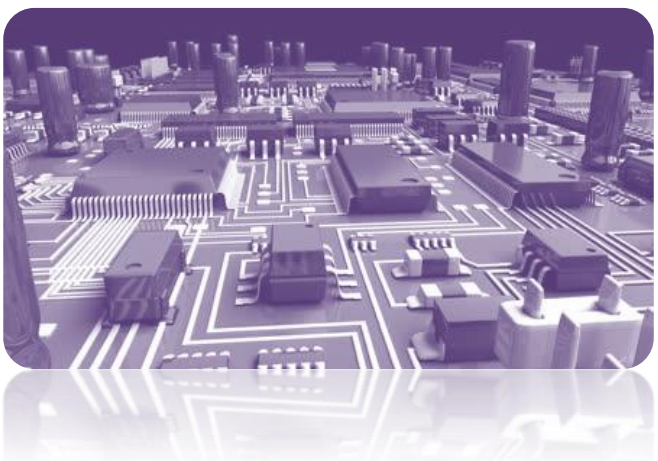

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