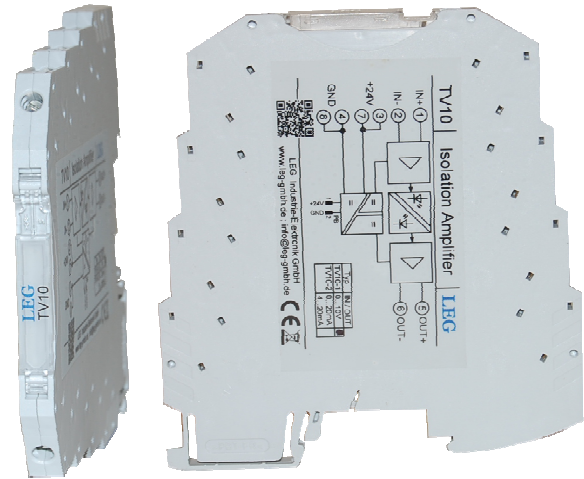


## Isolation amplifier 6, 2 mm bipolar, fixed range

**TV11**

Characteristics:

- Linearity error < 0, 2%
- Bipolar, fixed configured in- and outputs
- Transmission frequency 10Hz
- Galvanic 3-way isolation between input – output – supply voltage
- Test voltage 1,5kV
- Supply voltage 24VDC
- Mountable on 35mm cap rail TS35
- Clear terminal labeling
- Narrow design
- Shape 6, 2 mm
- PB - Power-Bus - compatible
- High reliability, 5 years warranty



Description:

The isolation amplifiers of the series TV10 have been developed for galvanic isolation of DC current- or voltage signals. Therefore a 3-way isolation between input- output- and supply voltage is generated. The isolation amplifier is available in two versions: IN: 0...±10V / OUT: 0...±10V and IN: 0...±20mA / OUT: 0...±20mA. Zero point and gain are fixed.

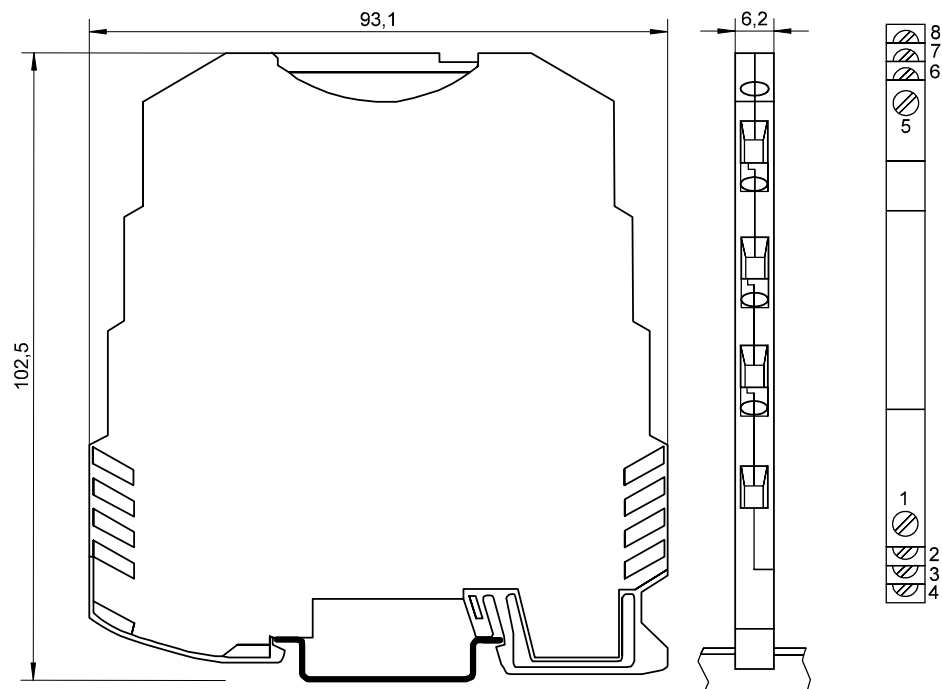
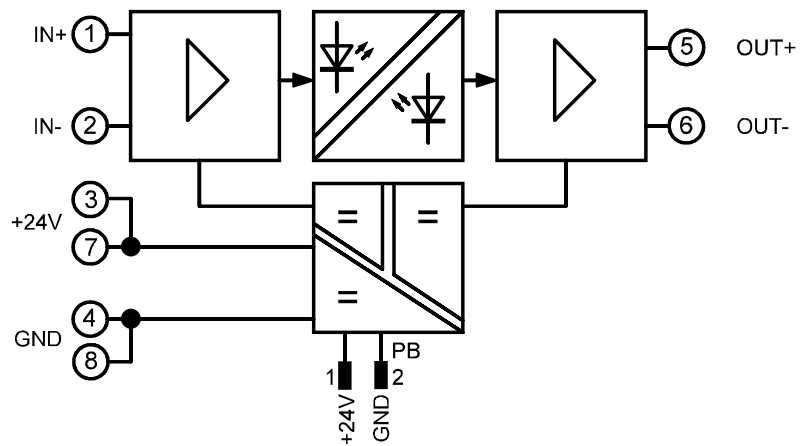
Application:

Cheap potential isolation of equal analog signals, signal filtration based on low pass filter characteristic.

**Order code:**

**Version:**      Input:    Output:

<b>TV11-1</b>	0...±10V	0...±10V
<b>TV11-2</b>	0...±20mA	0...±20mA



## Technical Data

### Supply:

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Supply voltage : 19, 2...30VDC  
Power consumption : < 0,7VA

### Inputs:

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Voltage input : 0...±10V / Rin=100kΩ / overload max. 50V  
Current input : 0...±20mA / load resistor 50Ω / overload max. 100mA

### Outputs:

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Voltage output : 0...±10V / max. ±20mA  
Current output : 0...±20mA / load resistor max. 500Ω  
Load resistor error : < 0, 05%  
Ripple & noise : < 10mV  
Transmission frequency: 10Hz

### Accuracy:

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Linearity error : < 0, 2%  
Temperature coefficient: < 100ppm / K

### General data:

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Operating temperature : -10...70°C  
Storage temperature : -25...+85°C, condensation before putting into operation is not allowed  
Test voltage : 1,5kVAC / 50Hz / 60 sec. / between input / output / supply  
Rated insulation voltage: 50V AC/DC  
Basic insulation, surge voltage category 2, pollution degree 2 according to DIN EN61010-1.  
MTBF : 350 years mean time between failures – according to EN 61709 (SN 29500).  
Requirements: Stationary operation in clean rooms, average ambient temperature 40 ° C, no aeration, continuous operation  
CE conformity : EN 61326-1, EN 61000-4-2/3\*/4/5/6\*, EN 61000-6-4  
\* during measurements are small deviations possible

### Body:

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Dimension : 6,2mm adjoin body, 6,2x93,1x102,5  
Material : PA / V0  
Protection category : IP20  
Connection : M3-screw-type terminal 0, 14 - 2,5mm<sup>2</sup>, flexible or inflexible  
Fixing : Snap-on mounting for norm rail TS35  
Weight : 45g

**Note on safety:**

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Disconnect the power supply before attempting to open the unit.

During the operation of this module it is possible that parts of the module, even there is extra-low voltage, (for example shunt measurement) are under dangerous voltage! Therefore a non-observance of this caution may cause damage of property or physical injury.

Only trained qualified personnel should install or operate the unit. Before installation the qualified personnel should read the documentation and should familiarize themselves with the unit.

If there is visible damage to the body of the unit it should be immediately replaced and not put into operation.



Please ensure that there is a sufficient prevention against electrostatic discharge during installation of the unit.

**Installation Information:**

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Pay attention and make sure the unit is far away from mounted sources that may disturb the device such as magnetic coils, transformers, frequency converters etc.

**Wiring advice:**

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Use only shielded cables. The shield is to be connected extensively to ground. Do not mix power- and signal-wires/cables in the same cable tray.

**Limited warranty:**

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The LEG Industrie-Elektronik GmbH warranted that the product does not have any material or processing defects in a period of 5 years after date of delivery.

It is up to the choice of LEG to repair or to exchange an inoperative unit.

Subsequent damages or any claim for indemnification above the functionality of the unit are excluded.

This limited warranty is only valid if ...

1. the product was installed and put into operation according to the LEG operation documentation;
2. the technical configuration of the power supply was abided;
3. the product was not used for unintended purposes;
4. there were no unauthorized modifications or manipulations, misuse or repairs without previous agreement from LEG .

Our Terms of Trade are based on the “General Conditions for the supply of products and services of the Electrical and Electronics Industry” including the “Complementary Clause: Extended Reservation of Property” of the ZVEI e.V. (German Association of Electrical Manufacturers).

**Miscellaneous:**

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We expressly reserve the right, without previous notice, to correct errors contained in any data of this information brochure, and to make alterations to the program and technical modifications.