

## Signal Converter / - Amplifier 3 channels into 5V (TTL)

**SU21**

Characteristics:

- Signal amplifier / level converter
- Transmission frequency 500kHz
- Output 5VDC (TTL) / 3x 50mA
- Galvanic isolation Input / Output
- Each channel is indicated by 1 LED
- Fast switching times from 0,2µs/0,4µs
- Supply 24VDC
- Mountable on 35mm cap rail TS35
- Clear terminal labeling
- Narrow design
- Shape 17,5mm, super low
- PB - Power-Bus - compatible
- High reliability, 5 years warranty



Description:

The units of the signal converter series SU21 have been developed for amplifying and/or level converting with galvanic isolation. There are three channels at disposal. High ohmic 24V or alternatively 5V, for example TTL signals, are transmitted into resilient 5V-signals (TTL). One LED in each output displays the switch status.

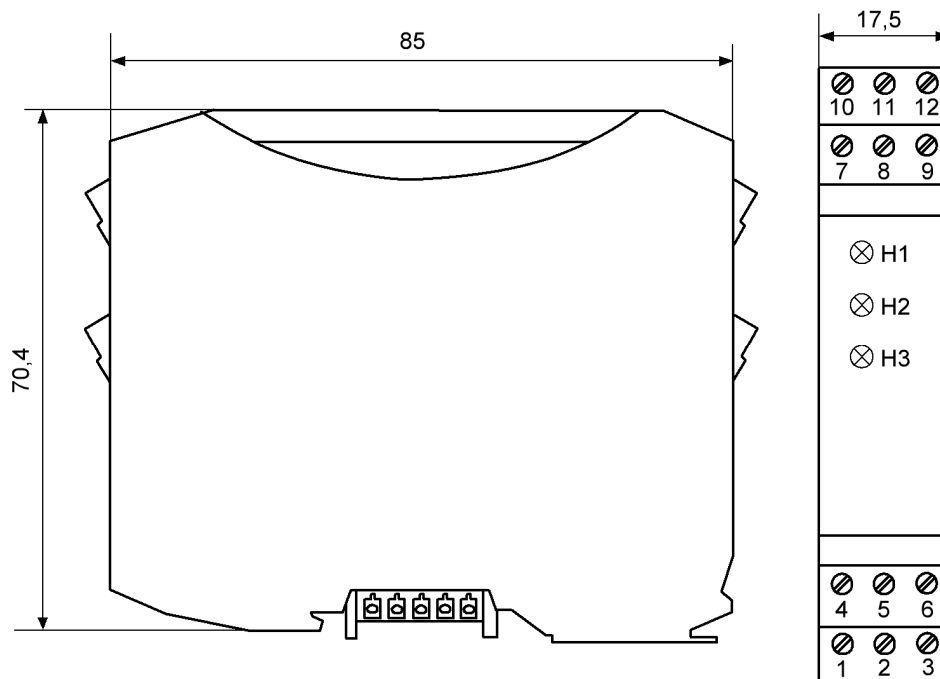
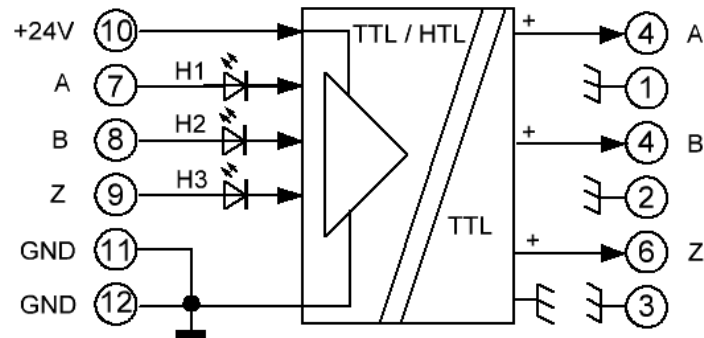
Application:

Signal conversion 24VDC (HTL) into 5VDC (TTL).  
Converting high-impedance signals, signal amplification

Order-No.:

Input:

<b>SU21-1</b>	24VDC (HTL)
<b>SU21-2</b>	5VDC (TTL)



## Technical data

### Auxiliary power:

---

Supply voltage : 19, 2...30VDC  
Current consumption : 100mA + load

### Inputs:

---

Switch level:	Operating range	Input current	Low	High
SU21-1	: 18...30VDC	2,8...6,5 mA	< 5V	> 18V
SU21-2	: 3,5...6,5VDC	0,5...1 mA	< 1V	> 3,5V

### Outputs:

---

Voltage output : 5VDC  
Current output : Max 3 x 50mA  
Transmission-Frequency : 500 kHz  
Switch time : ON 4µs, OFF 0, 2µs  
Level : TTL

### General data:

---

Operating temperature : 0...50°C  
Storage temperature : -25...+85°C, condensation before putting into operation is not allowed  
Electrical isolation : Input / power supply – output  
MTBF : 280 years Mean Time Between Failures compliant with EN 61709 (SN 29500).  
CE conformity : EN 61326-1, EN 61000-4-2/3\*/4/5/6\*, EN 61000-6-4  
\* during measurements are small deviations possible

### Body:

---

Dimension : See drawing, 17,5mm adjoin body, 17,5x70,4x90,5mm (with terminals)  
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 : 64g  
Mounting position : As you like

### Note on safety:

---



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:

---

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 advise:

---

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 guarantee:

---

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:

---

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.