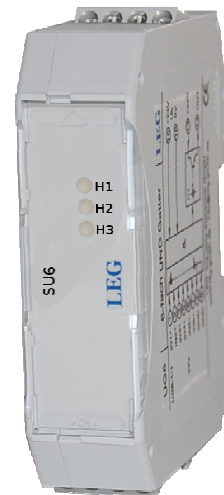


## Signal converter 3 channel 24V differential / RS422 (5V / TTL single ended)

**SU6**

### Characteristics:

- Level converter / level converter
- Transmission frequency 1MHz
- Output RS422 / 5V TTL / single ended
- 3-way potential isolation
- one status display per channel in the output
- fast switching times
- Supply 24VDC
- for mounting rail mounting TS35
- clear terminal marking
- small dimensions
- Style 22,5mm, super flat
- PB - Power-Bus - capable
- high reliability, 5 years warranty



### Description

The devices of the signal converter series SU6 are used for level conversion. Three channels are available. Depending on the connection, 24V differential signals or 24V ground related signals can be converted to RS422 or 5V TTL. This is ideal, for example, to transmit the signals of a rotary encoder interference-free and at the same time to adapt them to the voltage levels of the receiver device.

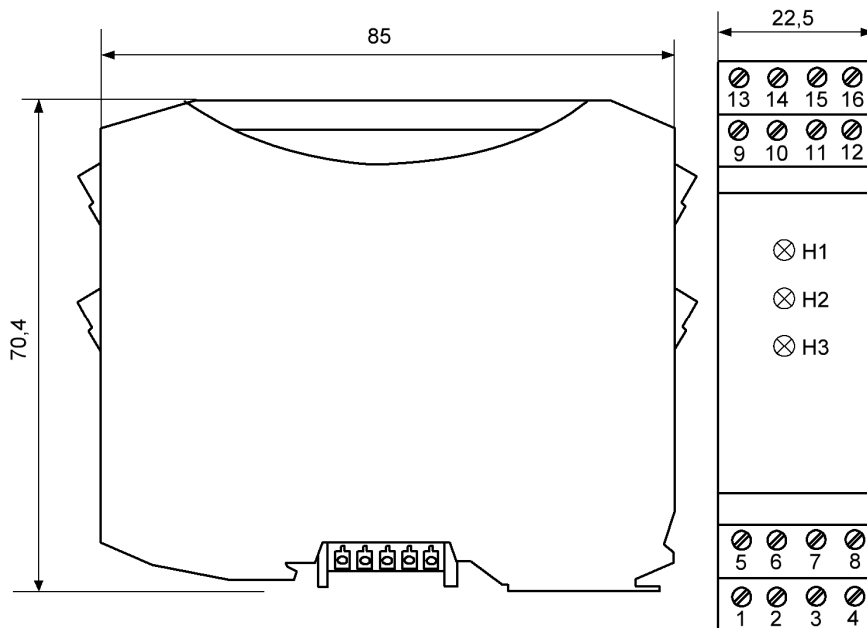
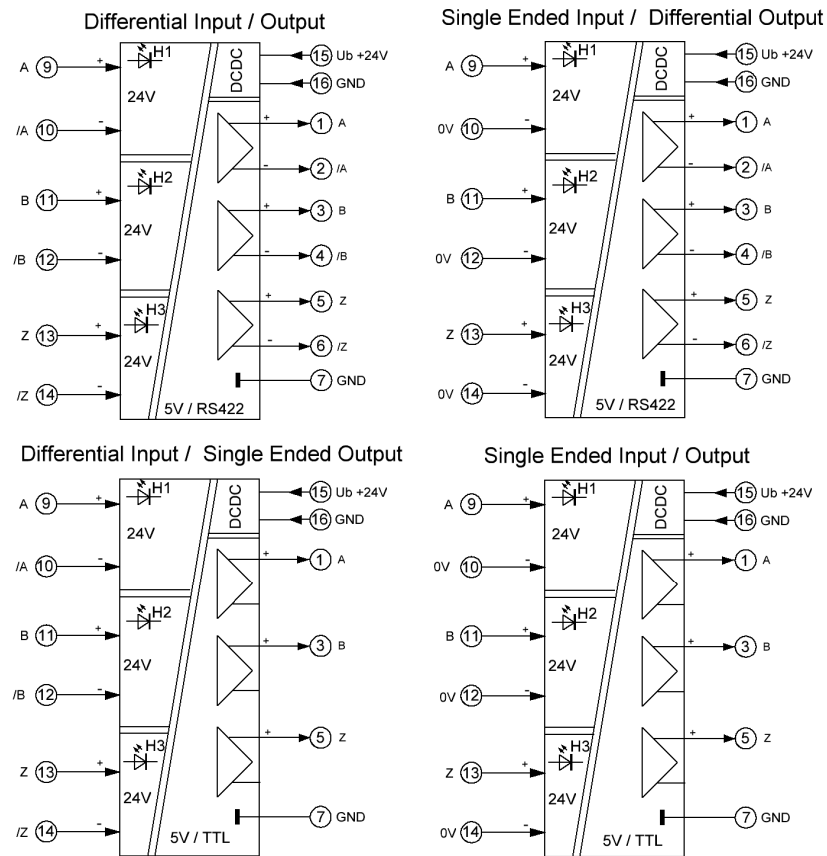
One LED per channel indicates the switching status of the output. A 3-way potential separation between input / output and auxiliary power helps to decouple the different system levels.

### Application:

Interference-free transmission of rotary encoder signals.

### Ordering key:

	Input:	Output:
<b>SU6-1</b>	24V differential / 24V referred to ground	RS422 ( 5V TTL)



## Technical data

### Supply:

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Power supply : 19,2...30VDC  
Power consumption : max. 1,5VA

### Input:

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Voltage : 15...30V (Nominal 24V differential) High > 15V / Low < 8V  
15...30V (Nominal 24V referred to ground) High > 15V / Low < 8V  
Current : 5,5...15,5mA (12mA at 24V)

### Output:

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Voltage output : SU6-1: RS422 / 5V TTL referred to ground  
Output current : max. 3 x 50mA  
Transmission frequency: max. 1 MHz  
Signal delay : ton = 400 ns, toff = 500 ns  
Short circuit proof : <1s

### General data:

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Operating temperature : 0...50°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  
MTBF : 125 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 61000-4-2/4/5/6\*, EN 61000-6-4  
\* during measurements are small deviations possible

### Body:

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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

#### **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.