

Signal converter / - amplifier 4-channel with NPN input

SU7

Characteristics:

- Signal converter with NPN input
- Transmission frequency 200kHz
- Output = U_{cc} / 4x100mA
- short circuit proof
- One status LED per channel at the output
- fast switching time 0,5µs/1µs
- Power supply U_{cc} 9...30VDC
- for DIN rail mounting TS35
- Clear terminal marking
- small dimensions
- Housing 17,5mm, super flat
- PB - Power-Bus compatible
- high reliability, 5 years warranty



Description:

The devices of the SU7 signal converter series are used for amplification and/or level conversion of actuators or sensors with NPN output. Four channels with NPN input are available to the user and signals with a frequency of up to 200 kHz can be transmitted. The devices are available in two output variants, positive switching and push-pull output.

The pulse-switching version emits the signal from the power supply (9...30V) when activated and the output is high-impedance when not activated. As a result, this device version is also suitable for connecting the outputs as an OR link.

The variant with push-pull output emits the signal from the power supply (9...30V) when activated and the output is actively switched to GND when not activated. This makes this device variant particularly suitable for transmission over long cable runs and for rotary and pulse encoders.

An LED in each output indicates the switching status. The short-circuit-proof outputs provide protection in the event of a fault. An auxiliary power supply of 9...30Vdc is required for the power supply. The devices are mounted in a 17.5mm wide plastic housing, which is suitable for mounting on a top-hat rail.

Application:

Signal converter NPN to 24VDC (HTL)

Conversion of high-impedance signals, signal amplification

Order-Nr.:

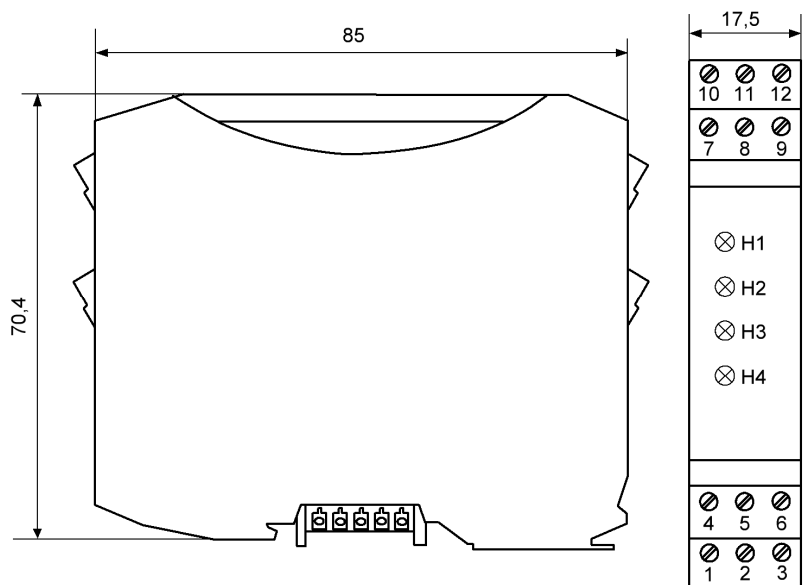
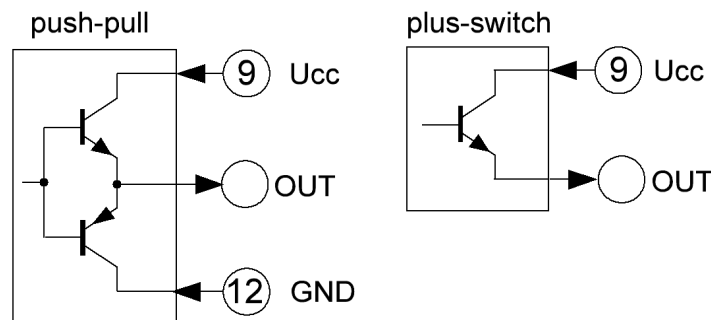
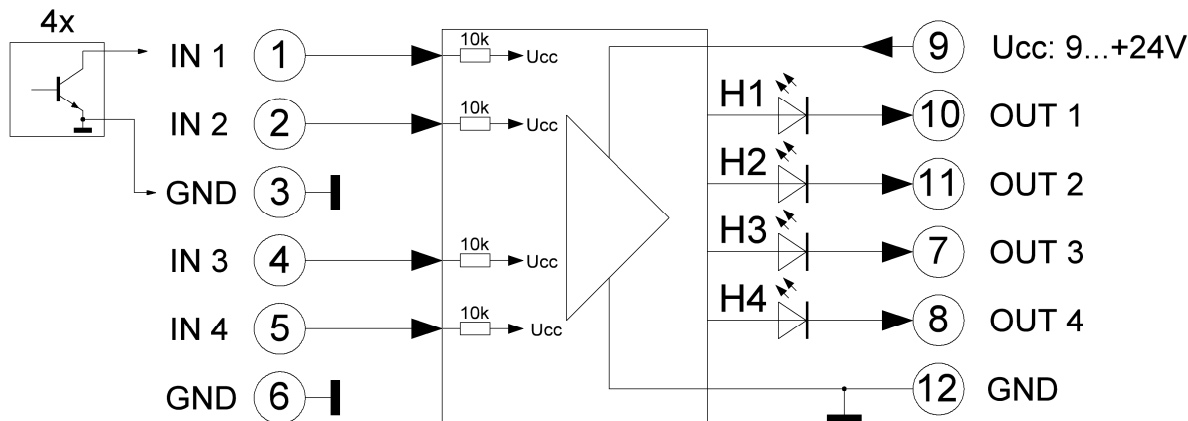
Input:		switching		Output:
	SU7-	-		
NPN		plus-switch	8	24VDC/4x 100mA
		push-pull (HTL)	9	24VDC/4x 100mA

Order example:

Signal converter SU7:

Output plus-switch

Order-Nr.: SU7-8



Technical data

Auxiliary power:

Power supply : 9...30VDC (Ucc)
Current consumption : 100mA + Load

Input:

Switching level	:	Low:	High:	Rin (pull-up at Ucc):
NPN	:	< 2V	> 5V	10kOhm
Overload	:	max. 40V		

Output:

Output voltage : Ucc -1,5V
Output current : max. 4 x 100mA, Short-circuit proof max. 2s
Switching times : On: 1µs, Off: 0,5µs
Transmission frequency: 200kHz
Switching modes : optional: plus-switch or push-pull (HTL)

General data:

Operating temperature : 0...50°C
Storage temperature : -25...+85°C, condensation before putting into operation is not allowed
MTBF : 280 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
* small deviations are possible during the measurements

Body:

Dimension : Cf. drawing, 17,5mm adjoin body, 17,5x70,4x90,5mm (with terminals)
Material : PA / V0
Protection category : IP20
Connection : M3-screw-type terminal 0, 14 – 2,5mm², 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 advice:

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:

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.