

## Optocoupler 24VDC – 500 kHz, input current: < 2mA

**OK11**

### Characteristics:

- Push-pull output, plus/ground switching
- Input current < 2mA
- Transmission frequency 500kHz
- Output 24DC / 50mA
- Status display in output
- Fast switching times
- Mountable on 35mm cap rail TS35
- Mountable side by side via link plug
- Tension spring connection
- Shape 6,2mm
- High reliability, 5 years warranty



### Description:

Image similar

The devices of the optocouplers series OK11 have been developed for galvanic isolation resp. the amplification of TTL/HTL - signals. Because of the extremely low input current they are particularly suitable for driving by CMOS/TTL – outputs. Because of the push-pull output they are particularly suitable for the transmission of signals via long lines. One LED in output displays the switch status.

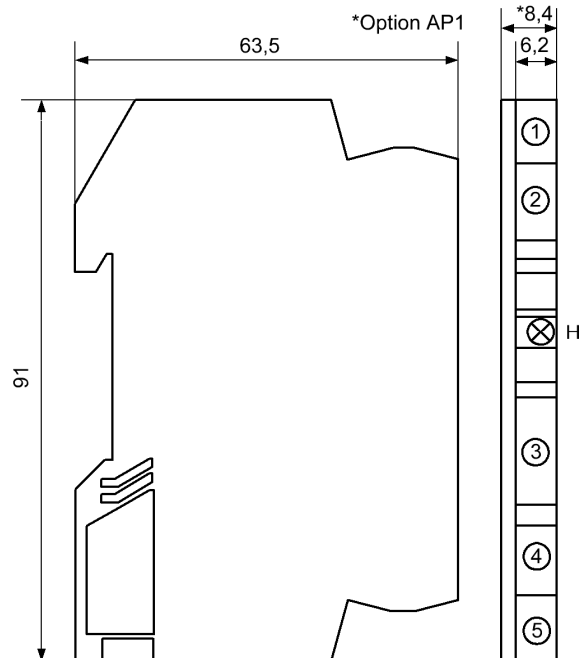
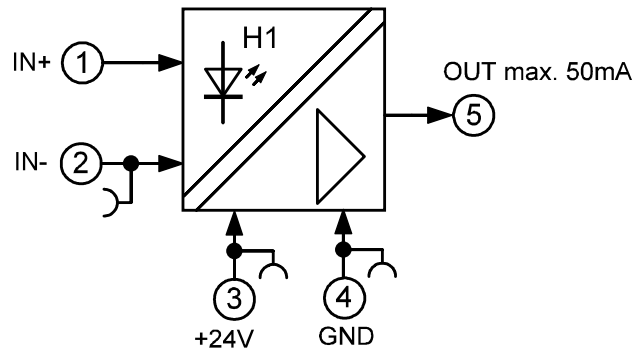
### Application:

Galvanic isolation for protection of for example: process computer outputs, IPC's or  
Driving by CMOS/TTL – outputs.

Signal transmission via long lines / Signal amplification / Signal transforming / Level transforming

### Order code:

	Input:	Output:
<b>OK11-1</b>	24VDC / <2mA	24VDC / 50mA
<b>OK11-2</b>	5VDC / <2mA	24VDC / 50mA
<b>OK11-3</b>	15VDC / <2mA	24VDC / 50mA
<b>OK11-4</b>	3VDC / <2mA	24VDC / 50mA



## Technical data

### Supply power:

---

Supply voltage : 19, 2...30VDC (U<sub>cc</sub>)  
Power consumption : 24mA + load

### Inputs:

---

			Low	High
OK11-1	:	16, 8...30 VDC / 0, 9...2, 0 mA	<6, 0 V	>16, 8 V
OK11-2	:	3, 0... 6, 25 VDC / 0, 5...2, 0 mA	<1, 8 V	>3 V
OK11-3	:	10, 5...18, 75 VDC / 0, 7...1, 9 mA	<5, 4 V	>10, 5 V
OK11-4	:	2, 0... 3, 5 VDC / 0, 5...2, 6 mA	<1, 0 V	>2 V

### Outputs:

---

Voltage output : max. U<sub>cc</sub> – 1,3V  
min. U<sub>cc</sub> – 3,4V  
Current output : max. 50mA,  
Short circuit proof : no  
Signal running time : t<sub>on</sub> < 250ns, t<sub>off</sub> < 400ns  
Transmission frequency: 500 kHz

### General data:

---

Operating temperature : 0...50°C  
Storage temperature : -25...+85°C, condensation before putting into operation is not allowed  
MTBF : 935 years Mean Time Between Failures – according to EN 61709 (SN 29500).  
Requirements: Stationary operation in clean rooms, average ambient temperature 40 °C, no forced ventilation, continuous operation  
CE conformity : EN 61326-1, EN 61000-4-2/3\*/4/5/6\*, EN 61000-6-4  
\* during measurements small deviations are possible

### Body:

---

Dimension : See drawing, 6,2mm terminal block body, 6,2x63,5x91mm  
Material : PA 6, 6 / V2  
Protection category: IP20 with side cover/end cover plate  
Connection : Spring force connection 0, 2 - 4mm<sup>2</sup>, inflexible, 0, 2 – 2,5mm, flexible  
Contact load with link plugs max. 24A  
Fixing : Snap-on mounting for norm rail TS35  
Mounting position : As you like / mountable side by side  
Weight : 23g

**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.