

# ILED – HUT – 350mA



Precision constant current  
power supply for LED's  
with DIN rail housing

DATASHEET  
Rev. 1.0

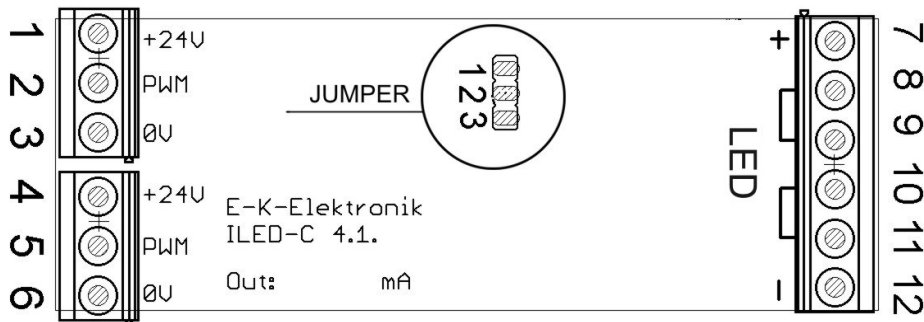
## 1 General Description

The ILED-HUT– 350mA is a constant current power supply for high brightness LED´s. It works as a step down regulator with low side current measurement for regulation. Dimming the output current is possible using the DIM-input with a PWM signal. The output current may be switched on or off by using the PWM input. By setting a jumper, the type of PWM input can be changed between high side controlled and low side controlled. The connectors for supply and dimming are duplicated for wiring the regulators in a serial topology. Additional connectors at the LED output allow driving up to three LED groups in serial topology.

## 2 Features



- Input Voltage Range up to 36V
- Protection of outputs
- High efficiency (>92%)
- Thermal shutdown
- Single pin on/off and brightness control using PWM-signal
- PWM signal can be positive controlled or negative controlled,(setting a jumper)
- Housing fits with standard DIN rail (TS35)
- RoHS (2002/95/EG) compliant

## 3 Pinning



Name	Symbol	Description
1	+24 V ( $V_{in+}$ )	Positive supply voltage input
2	PWM ( $V_{dim}$ )	Dimming, on/off input
3	0V ( $V_{in-}$ )	Negative supply voltage input
4	+24 V	Positive supply voltage output
5	PWM	Dimming, on/off output
6	0V	Negative supply voltage output
7	LED + ( $I_{out+}$ )	Positive LED output
8	bridged	
9		
10	bridged	
11		
12	LED - ( $I_{out-}$ )	Negative LED output

## 4 Jumper settings

	Jumper set on 1-2: Dimming and switching with PWM + Signal (active high (50-100% of $V_{in}$ ) = ON)
	Jumper set on 2-3: Dimming and switching with PWM - Signal (active low 0-15% of $V_{in}$ ) = ON)

## 5 Absolute maximum ratings

Maximum supply Voltage:	36V
$V_{dim}$ input Voltage	$-0,3 \leq V \leq +V_{in}$
Power dissipation	internally limited
Current through $V_{in} +$	4A
Current through $V_{in} -$	4A
Current through $I_{out} +$	internally limited
Current through $I_{out} -$	internally limited
Storage temperature range	-40°C to 150°C

**Note:** All voltages respect to  $V_{in-}$

## 6 Operating conditions:

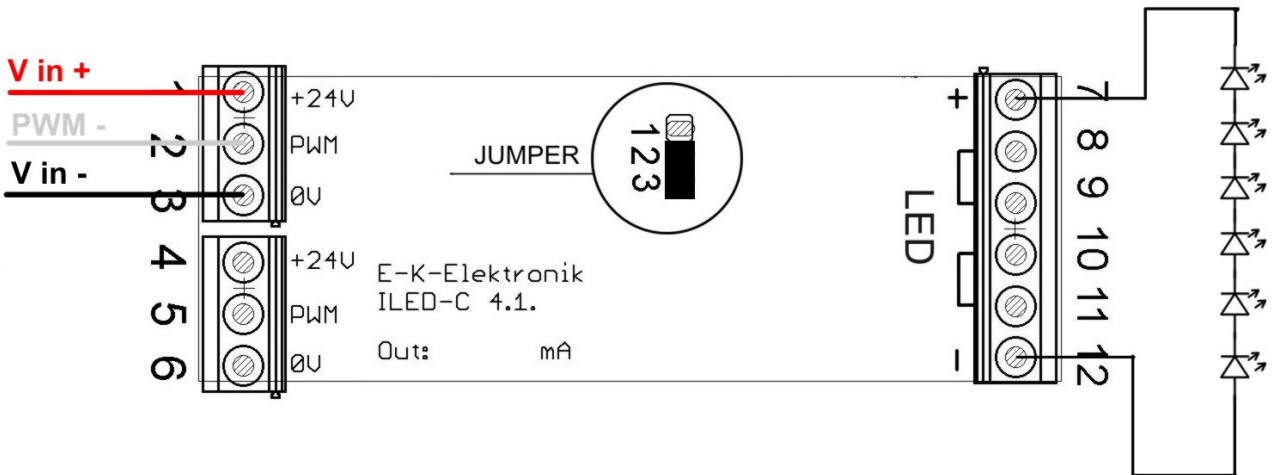
Supply Voltage $V_{in}$ :	5V to 36V (24V typical)
<u>Jumper setting 1-2:</u> $V_{dim}$ input Voltage, LEDs ON	50% -100% of $V_{in}$ (12 V – 24 V typical)
<u>Jumper setting 2-3:</u> $V_{dim}$ input Voltage, LEDs ON	0% - 15 % of $V_{in}$ ( 0V – 3,6 V typical)
Temperature range	-40°C to +80°C

## 7 Electrical characteristics

Symbol	Parameter	Condition	Value			Unit
			Min	Typ	Max	
$I_{out}$	Output current	$V_{in} + = 24VDC,$	-5%	350	+5%	mA

## 8 Example wiring schemas

6 LEDs serial, negative PWM dimming



3 LED groups in serial, positive PWM dimming

