

# LEDLink-OEM

(LDDRV 3.x)

## specification

### For POWER LED driving - no housing

## Output

Output				
Parameter	Min	Nom.	Max	Remark
No of outputs		1		
Continuous LED current	0 mA		3 A	Heatsink required
Pulsed LED current	0 mA		5 A	
LED Voltage	< 0.1mV		> $V^{LDIN} - 4 V$	
Resolution	300			
Accuracy	3% or 2steps			calibrated
Accuracy	10.00%			Uncalibrated
Temperature coeff.			2.00%	
Efficiency ( $\eta$ )		0.7		70.00%

## Power Supply Requirements

The power of the controller part and the LED may be separated. By default the **PWR INPUT** supplies both the controller and the LED.

Power Supply				
Parameter	Min	Nom	Max	Remark
Input Voltage - controller	12 V		35 V	DC
Input Current - controller			200 mA	
Input Voltage - LED	12 V		35 V	DC
Input Current - LED				(1)
Efficiency ( $\eta$ )		0.7		70.00%

(1) Depends on the LED voltage ( $V^{LED}$ ), LED current ( $I^{LED}$ ), input voltage ( $V^{IN}$ ) and efficiency ( $\eta$ ):  
$$I^{IN} = (V^{LED} * I^{LED}) / (V^{IN} * \eta)$$

## Modes of operation

- Continuous current
- Flash (Adjustable parameters: pulse width, delay, number of pulses, pause between pulses)
- HW triggered pulse (Falling/Rising Edge, LOW/HIGH logic CMOS level)
- Light Follower (switch on by light / by dark)
- Dimmer - light intensity controlled by PWM / wiper

### *Pulse Mode parameters*

<b>Pulse Mode parameters</b>		
Delay from start signal	0 – 6sec	In 100 µsec increments
Pulse width	100 µsec – 6 sec	In 100 µsec increments
Pause between pulses	100 µsec – 6 sec	In 100 µsec increments
Pulse repeat count	1 – 60000	Endless repeat available
Timing accuracy	10 <sup>-3</sup>	or +/- 200µsec

### *HW trigger input*

<b>HW trigger input</b>	
Input type:	5V CMOS level compatible
	Weak pull up for open collector $R^{PULLUP} = 10k\Omega$
Start condition	Rising / Falling edge
<b>Extension – opto isolated input</b>	
Active current	10 mA
Active voltage	> 4.5V , max. 30V

### *Dimmer/Wiper input*

<b>Dimmer/Wiper input</b>		
Input type – PWM	5V CMOS level compatible	
	Weak pull up for open collector $R^{PULLUP} = 10k\Omega$	
Wiper	10kΩ - 50kΩ	

## Operating temperature range

0 – 35 °C

# LED driving current ranges, LED current limits

<b>LED driving current ranges</b>				
<b>Range [mA]</b>	<b>Continuous current limit [mA]</b>			<b>Pulsed limit</b>
	<b>No heatsink</b>	<b>Small heatsink</b>	<b>Normal heatsink</b>	
<b>1000</b>	500	No limit	No limit	No current limit The pulse width and duty cycle may be limited
<b>2000</b>	<i>n.a</i> <sup>(1)</sup>	1200	No limit	
<b>3000</b>	<i>n.a</i> <sup>(1)</sup>	<i>n.a</i> <sup>(1)</sup>	No limit	
<b>5000</b>	<i>n.a</i> <sup>(1)</sup>	<i>n.a</i> <sup>(1)</sup>	<i>n.a</i> <sup>(1)</sup>	

<sup>(1)</sup> Not allowed combination

## Interfaces

### PC Interface

CMOS level inverted serial line

Converter cables - NOT INCLUDED

- RS232 level shifter
- USB (USB CDC: the device seen as virtual COM port)

### Front panel functions

2 push buttons:

- on / off / store
- intensity