

# LED-CONVERTER UNIT

**PS-LD0101-x-yyy(S) (9 W)**

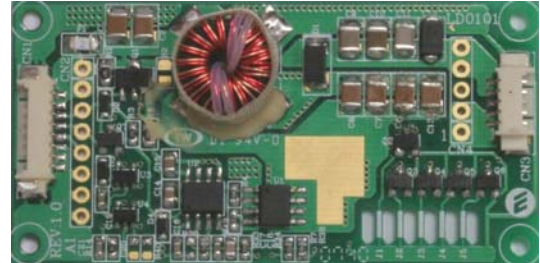
(PRELIMINARY INFORMATION)

**DESCRIPTION :**

This low profile LED-Converter is developed for max. 1 LED-line

**APPLICABLE:**

- 1 LED line
- Pout max. 9 Watt
- LED Voltage max. 35V
- Lamp Current max. 300 mA<sub>dc</sub>
- Input Voltage 10.8 ~ 13.2 V<sub>dc</sub>



Connector style

**FEATURES :**

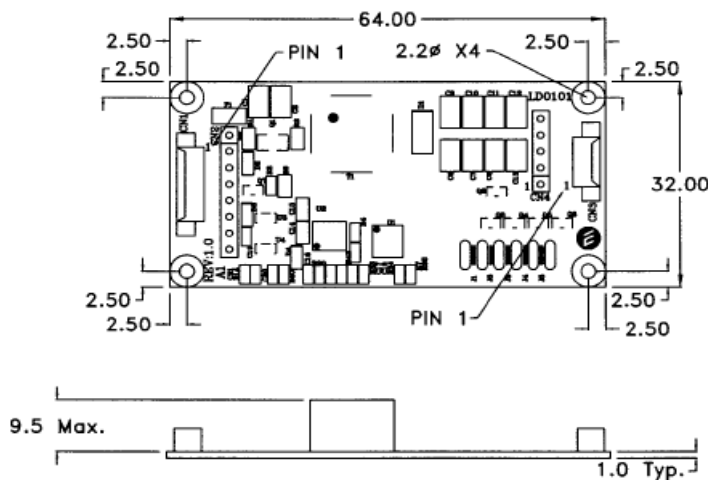
- Independent Open LED Detection
- Voltage or Ext. PWM Dimming
- 1000:1 dimming ratio with external PWM
- Remote ON / OFF
- Wide Input Voltage Range
- RoHS compliant (S)

**TEMPERATURE & HUMIDITY :**

- Operating Temperature Range -20°C ~ +70°C
- Storage Temperature Range -20°C ~ +85°C
- Humidity 95 %RH max

**DIMENSIONS :**

**L x W x H 64 x 32 x 10.5 mm**



Weight :5 (g) typ.  
Tolerance: ±0.3mm

Note: Please use plastic screw in case of a non-insulating mounting base!

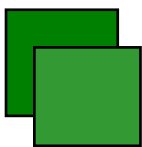
**Components**

No.	Part Description	Qty.	Material	Note
1	PCB	1	UL94V-0 (FR-4 or CEM-3)	t=1.0mm
2	Connector CN1	1	53261-0890	Molex
3	Connector CN2	1	53261-0590	Molex

**Power Systems – The Power Solution**

Web: [www.Power-Systems.de](http://www.Power-Systems.de)  
Email: [Info@Power-Systems.de](mailto:Info@Power-Systems.de)

Address: Hauptstr. 48 ; 74360 Ilsfeld-Auenstein / Germany  
Tel. : + 49 / 70 62 / 67 59 - 6  
Fax: + 49 / 70 62 / 67 59 - 800



# LED-CONVERTER UNIT

PS-LD0101-x-yyy(S) (9 W)

(PRELIMINARY INFORMATION)

### Input side CN1:

Pin No.	Symbols	Ratings
CN 1-1	Vin	10.8 ~ 13.2 Vdc
CN 1-2	Vin	10.8 ~ 13.2 Vdc
CN 1-3	Vrmt	0 ~ 0.8 = OFF / 2.5 ~ 5.0 = ON
CN 1-4	Ext. PWM	0 ~ 0.5 = LOW / 2.5 ~ 5 = HIGH
CN 1-5	Vbr	0.0 ~ 5.0 (5V=low brightness)
CN 1-6	GND	-
CN 1-7	GND	-
CN 1-8	GND	-

### Output side CN2

Pin No.	Symbols	Ratings
CN 2-1	RTN1 (-)	LED STRING 1 RETURN
CN 2-2	RTN1 (-)	LED STRING 1 RETURN
CN 2-3	NC	-
CN 2-4	Vhigh (+)	35 Vdc
CN 2-5	Vhigh (+)	35 Vdc

### Output Current Select Control

Jumper	JP 1	JP 2	JP 3	JP 4	JP 5	Output Current
Break	✂					+10 mA
Break		✂				+20 mA
Break			✂			+40 mA
Break				✂		+80 mA
Break					✂	+120 mA

Example:

30mA (Output Current Min.) + 10mA (JP1) = 40mA

30mA (Output Current Min.) + 80mA (JP4) = 110mA

JP1 ~ JP5 OPEN = 300mA

For more information, please visit our web-site.

### ELECTRICAL CHARACTERISTICS :

Parameters	Symbols	Conditions			Specification			Unit	Note
		Vin (V)	Vbr (V)	Tu (°C)	Min.	Typ.	Max.		
Output Current	Iout	10.8 ~ 13.2	0	-20~+70	TBD	30	TBD	mAdc	Duty 100%
Output Current	Imin	10.8 ~ 13.2	5	-20~+70	-	25	-	%	duty cycle
Input Current	Iin	10.8 ~ 13.2	0	-20~+70	0.03	-	0.5	Adc	
Open Load Shutdown	Vbias	10.8 ~ 13.2	0	-20~+70	-	35	-	Vdc	
Output Power	Pout	10.8 ~ 13.2	0	-20~+70	TBD	9	TBD	Watt	

Note 1 : Do not use analog dimming function and external PWM for dimming at the same time.

Note 2 : Pin terminal style converters have Molex connectors mounted.

Note 3 : Above output current is the default value. Correct output current is to be selected by user and under his sole responsibility. Exceeding currents will damage the LED backlight.

Note 4 : External PWM-signal is LOW active.

Note 5 : If using external PWM for dimming, please connect Pin CN1-5 to GND.

### Power Systems – The Power Solution

Web: [www.Power-Systems.de](http://www.Power-Systems.de)  
 Email: [Info@Power-Systems.de](mailto:Info@Power-Systems.de)

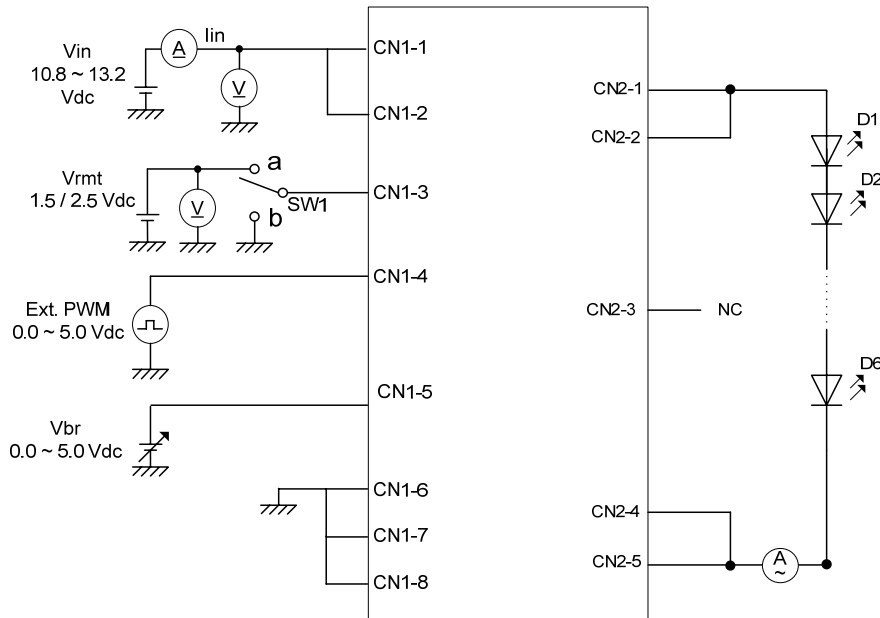
Address: Hauptstr. 48 ; 74360 Iilsfeld-Auenstein / Germany  
 Tel. : + 49 / 70 62 / 67 59 - 6  
 Fax: + 49 / 70 62 / 67 59 - 800

# LED-CONVERTER UNIT

PS-LD0101-x-yyy(S) (9 W)

(PRELIMINARY INFORMATION)

## TEST CIRCUIT :



## ORDER KEY :

### PS-LD0101-x-yyy

With order of this converter please give the following key:

- x to be replaced by:
- 1 for connectors
- 2 for Pin-Terminal

in case of quantity orders (300+ pcs), the proper current selection can be ordered:

- yyy to be replaced by:
- three digit value for output current per LED line (from 030 to 300 including)

- Attention:** \* if no value is mentioned, 30 mA output current per LED line will be set as default
- \* a selection of incorrect LED current may decrease lifetime or destroy the backlight
- \* orders for preconfigured converters can't be cancelled

Examples:

PS-LD0101-1-040 (S)  
40 mA output current  
PCB with connectors

PS-LD0101-2-150 (S)  
150 mA output current  
PCB with Pin-Terminal

## CABLES :

- for input:** 500 mm, stripped and tinned ends, order key <input cable #13>
- for output:** 500 mm, stripped and tinned ends, order key <input cable #5>

## Power Systems – The Power Solution

Web: [www.Power-Systems.de](http://www.Power-Systems.de)  
Email: [Info@Power-Systems.de](mailto:Info@Power-Systems.de)

Address: Hauptstr. 48 ; 74360 Ilfeld-Auenstein / Germany  
Tel. : + 49 / 70 62 / 67 59 - 6  
Fax: + 49 / 70 62 / 67 59 - 800