



# LITEMAX LID17A01

## LED Driver

(1st Edition 1/31/2008 )

All information is subject to change without notice.

Approved by	Checked by	Prepared by
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## General

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The LID17A01 is designed to power High White LED Light Bar to a nominal power level of 32W(TYPICAL)

Intensity control(0-100%) is accomplished by the user providing a variable dc level of 0.5V(full-on) to 4.8V(off) at pin7 of J1.

Enable control is accomplished at pin8 of J1(0V=off,5V=on)

## Specifications:

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- Vin=+10V to +14V  $\pm$ 10%
- Constant current and voltage function.
- No load voltage=30V
- LED Light Bar output Voltage=18V(TYPICAL)
- LED Light Bar output current=1.6A @100%(TYPICAL)
- Nominal LED Light Bar working frequency=125KHz  $\pm$ 5KHz
- Nominal PWM frequency=200Hz  $\pm$ 10%
- PWM duty cycle range=0 to 100%
- Average electrical efficiency > 90%

## LED Application

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This specification is applied to LED converter unit for 17 " 84 pcs LED backlight

## Operating Characteristics

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Item	Symbol	Conditions	MIN.	TYP.	MAX.	Unit	Remark
Input Voltage	Vin		10.0	12.0	14.0	V	
Input Current (Low Brightness)	IinL	VIN=12V,Vadj=5V	0.0	-----	-----	mA	
Input Current (High Brightness)	IinH	VIN=12V,Vadj=0V	3.19	2.615	2.205	A	
LED Current (Low Brightness)	IoutL	VIN=12V,Vadj=5V	0.0	-----	-----	Arms	
LED Current (High Brightness)	IoutH	VIN=12V,Vadj=0V	1.593	1.594	1.596	A	
Working	Freq	VIN=12V,Vadj=0V	120	125	130		
PWM Frequency	Freq	VIN=12V	180	200	220	HZ	
Brightness Control	Vadj	Connection of Voltage	0.5	-----	4.8	V	
ON/OFF Control	Von/off	Normal Operation	2	-----	5	V	
Output Voltage	Vout	VIN=12V,Vadj=0V	17.99	17.97	17.95	V	
Efficiency	$\eta$	VIN=12V,Vadj=0V	89.86	91.28	92.78	%	

## Environment

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Operation Temperature	-20 ~ 70°C
Operation Humidity	91.28% Max.RH
Storage Temperature	-40 ~ 85°C
Storage Humidity	91.28% Max.RH

## Connector Socket

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Input Connector :J1 (JST B2B-PH-K-S or Compatible)

PIN No	Symbol	Description
1	Vin	DC+12V
2	Vin	DC+12V
3	Vin	DC+12V
4	GND	Ground
5	GND	Ground
6	GND	Ground
7	Brightness	Brightness Control 5V~0V
8	Control	ON/OFF Control 0.8V(OFF) 2~5V(ON)

Output Connector :J2,J3 (JST S2B-EH or Compatible)

PIN NO	Symbol	Description
1	Output	LED High Voltage( + )
2	Output	LED Low Voltage ( - )

## Mechanical Characteristics

Dimension: 124mm\*50mm\*15mm

**INPUT CONNECTOR**  
**J1:**  
 PIN1:VIN  
 PIN2:VIN  
 PIN3:VIN  
 PIN4:GND  
 PIN5:GND  
 PIN6:GND  
 PIN7: BRIGHTNESS  
 PIN8: ON/OFF

