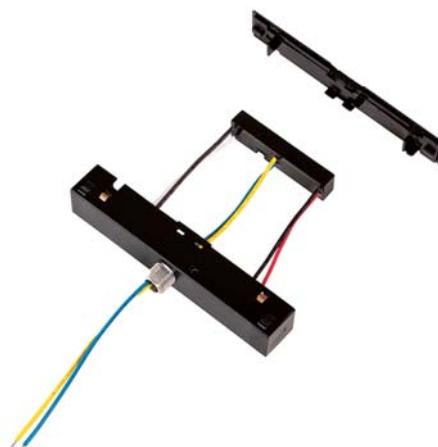
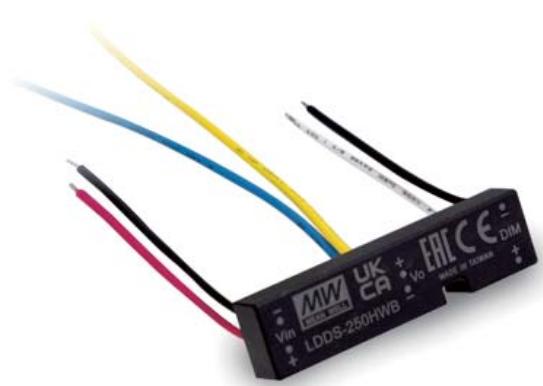




DC-DC Constant Current Step-Down LED driver

LDDS-H series



(Track adapter application)



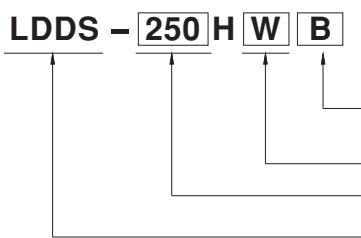
## ■ Features

- DC/DC step-down converter
- Constant current output: 250mA to 1000mA
- Wide input voltage: 12 ~ 56VDC(48V typ.)
- Wide output LED forward string voltage: 2 ~ 45VDC
- High efficiency up to 96%
- Built-in EMI filter, comply with BS EN/EN55015
- 3 in 1 dimming and remote ON/OFF control.
- Protections: Short circuit / Over temperature / Over current
- Cooling by free air convection
- Compact size and Fully encapsulated
- Suitable for driving illumination LED
- 5 years warranty

## ■ Description

LDDS-H series is a 45W DC/DC LED drive featuring constant current output. LDDS-H operates from 12~56VDC and offers models with different rated current ranging between 250mA and 1000mA. With the high efficiency up to 96%, The 94V-0 flame retardant plastic case with fully-potted to enhance the heat dissipation allows this series to fit for class III commercial track light or DC bus lighting application.

## ■ Model Encoding



Blank: Remote ON/OFF control  
 B: 3 in 1 Dimming function  
 W: Wire style  
 Output current (250/300/350/500/700/1000mA)  
 Series name



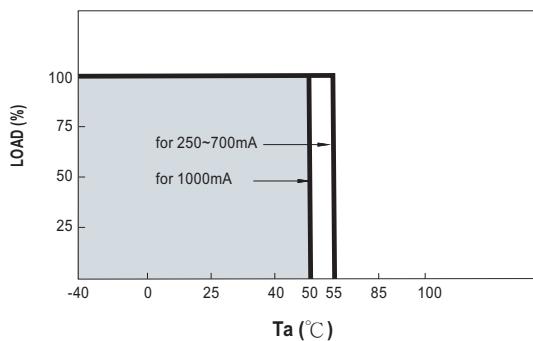
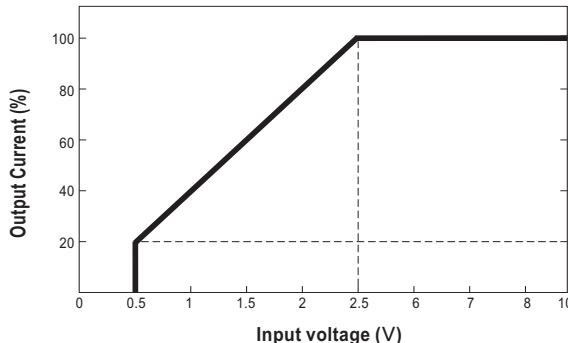
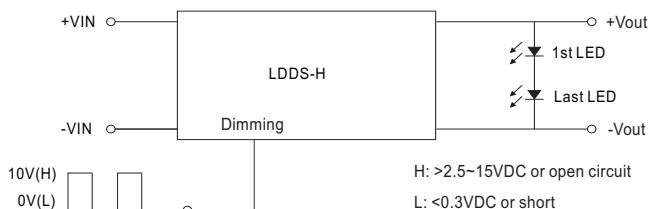
## ■ Applications

- DC battery source lighting
- Portable lighting
- Commercial lighting
- DC 48V Track lighting
- DC 24V landscape lighting
- For STUCCHI track adapters
- For **III** class III application(SELV)

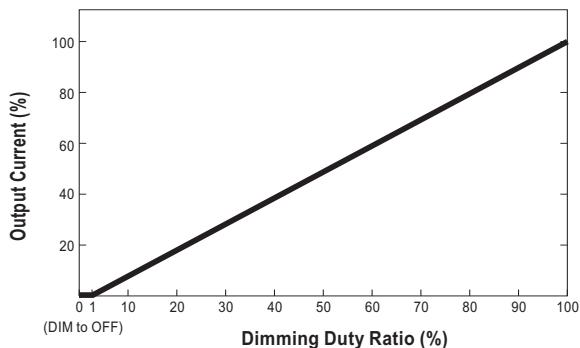
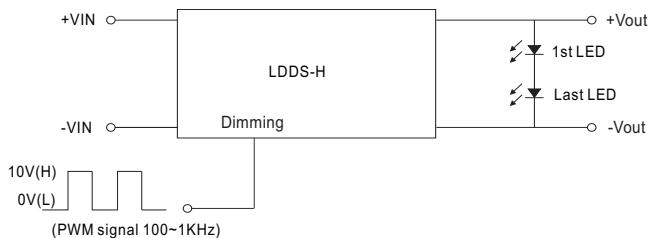


## SPECIFICATION

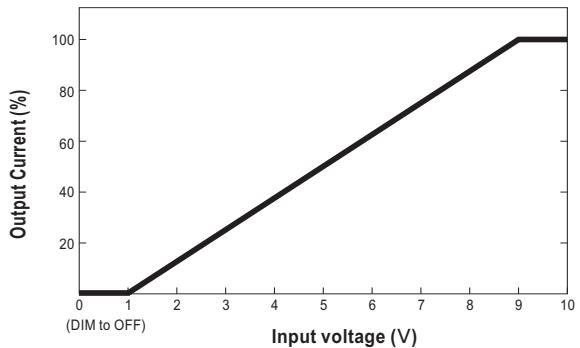
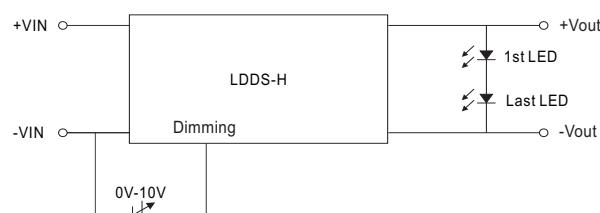
ORDER NO.		LDDS-250HW <input type="checkbox"/>	LDDS-300HW <input type="checkbox"/>	LDDS-350HW <input type="checkbox"/>	LDDS-500HW <input type="checkbox"/>	LDDS-700HW <input type="checkbox"/>	LDDS-1000HW <input type="checkbox"/>									
OUTPUT	CURRENT RANGE	250mA	300mA	350mA	500mA	700mA	1000mA									
	VOLTAGE RANGE Note.4	2 ~ 45VDC														
	CURRENT ACCURACY (Typ.)	$\pm 5\%$ at 48VDC input (or 24VDC)														
	RIPPLE & NOISE(max.) Note.2	150mVp-p	150mVp-p	200mVp-p	350mVp-p	350mVp-p	350mVp-p									
	SWITCHING FREQENCY	40KHz ~ 1000KHz														
	EXTERNAL CAPACITANCE LOAD (max.)	2.2uF														
INPUT	VOLTAGE RANGE	12 ~ 56VDC														
	EFFICIENCY (Typ.) Note.3	94%	95%													
	DC CURRENT	Full load Note.3	200mA	250mA	300mA	400mA	570mA									
		No load	6mA													
REMOTE ON/OFF & 3 IN 1 DIMMING	FILTER		Capacitor													
	REMOTE ON/OFF		Leave open if not use													
			Power ON with dimming: DIM ~ -Vin > 2.5 ~ 15VDC or open circuit													
			Power OFF : DIM ~ -Vin < 0.3VDC or short													
	PWM FREQUENCY		100 ~ 1KHz (4mA at PWM dimming off)													
PROTECTION	3 IN 1 DIMMING		0 ~ 10V / PWM / Resistor Dimming													
	SHORT CIRCUIT		Regulated at rated output current													
			Protection type: Can be continued, recovers automatically after fault condition is removed													
	OVER TEMPERATURE		T <sub>j</sub> 150°C typically(IC1) detect on main control IC													
			Protection type : Shut down, recovers automatically after temperature goes down													
ENVIRONMENT	WORKING TEMP.	-40 ~ +55°C (Refer to derating curve) @ full load														
	WORKING HUMIDITY	20% ~ 90% RH non-condensing														
	STORAGE TEMP., HUMIDITY	-55 ~ +125°C, 10 ~ 95% RH														
	TEMP. COEFFICIENT	$\pm 0.03\% / ^\circ C$														
	VIBRATION	10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes														
	OPERATING CASE TEMP. (max.)	90°C														
SAFETY & EMC	SAFETY STANDARDS	EAC TP TC 004 approved														
	EMC EMISSION	Compliance to BS EN/EN55015, EAC TP TC 020														
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,6,8, light industry level, criteria A, EAC TP TC 020														
OTHERS	MTBF	650Khrs min. MIL-HDBK-217F (25°C)														
	DIMENSION	47*12*7mm or 1.85" * 0.47" * 0.28" inch (L*W*H)														
	WEIGHT	9.5g, 36pcs/box, 0.43kg/box. 12 box per carton/6kg														
	POTTING MATERIAL	Epoxy(UL94-V0)														
NOTE	1. All parameters are specified at normal input(48VDC), rated load, 25°C 70% RH ambient. 2. Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1μF capacitor. 3. Test condition: 48VDC input, 36VDC output without Dimming. 4. Output voltage will always step down 4 volts from input DC voltage. 5. The output of LDDS-H should not be connected to the input of the same unit or output from other sources. ※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a>															

**Derating Curve**

**Standard Application(LDDS-HW series)(Remote ON/OFF control)**

**3 in 1 Dimming Control(LDDS-HWB series)**

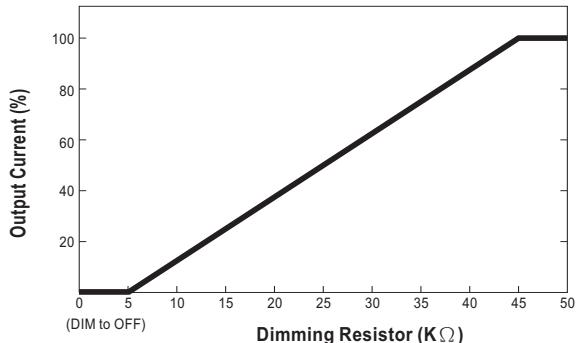
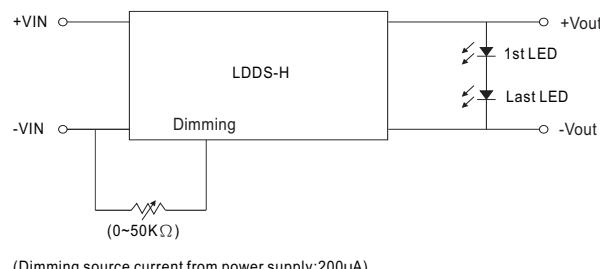
◎ Applying additive 10VDC PWM signal



◎ Applying additive 0~10VDC

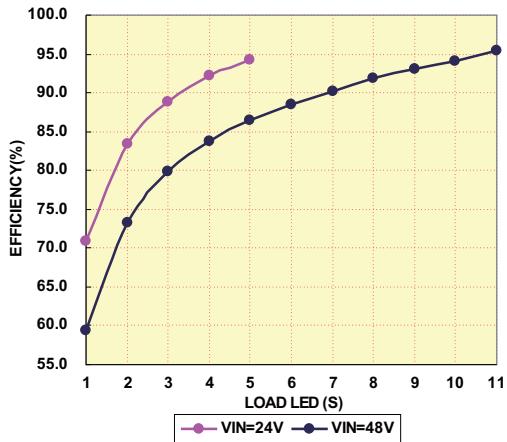


◎ Applying additive resistance

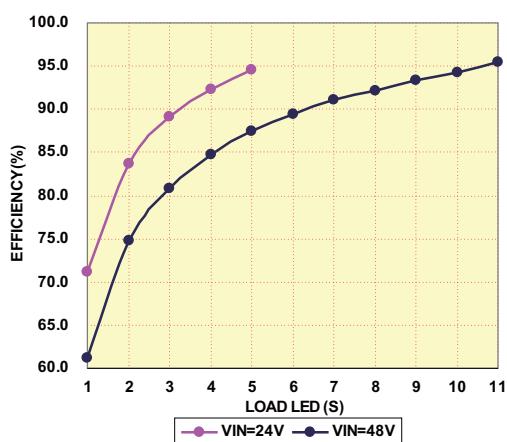


**Efficiency VS Output Voltage(Number of LEDs)**

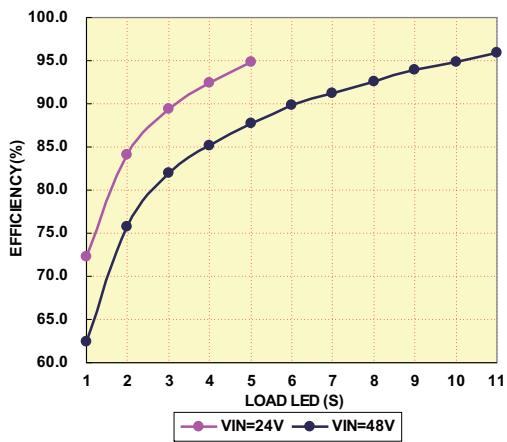
OUTPUT CURRENT 250mA



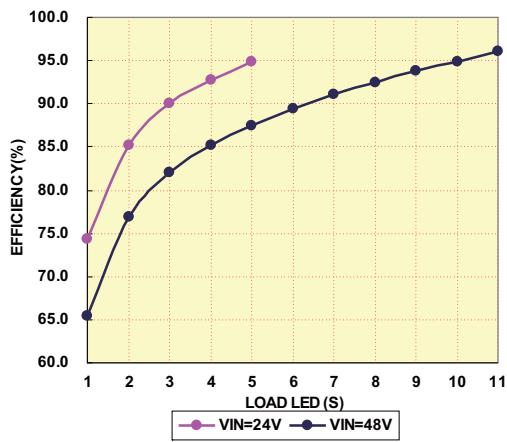
OUTPUT CURRENT 300mA



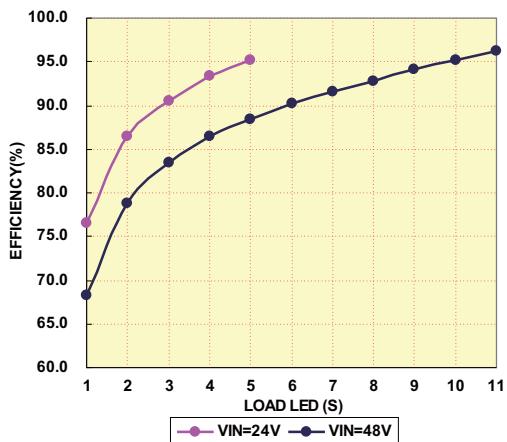
OUTPUT CURRENT 350mA



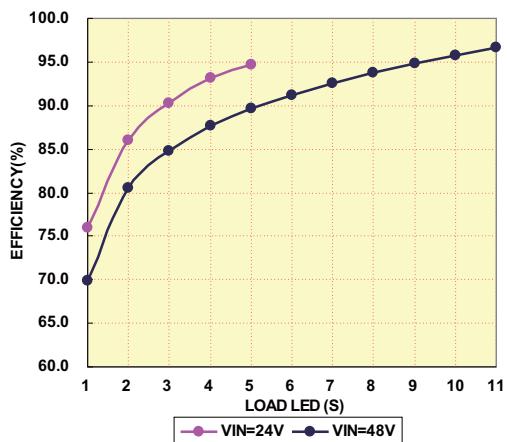
OUTPUT CURRENT 500mA



OUTPUT CURRENT 700mA



OUTPUT CURRENT 1000mA

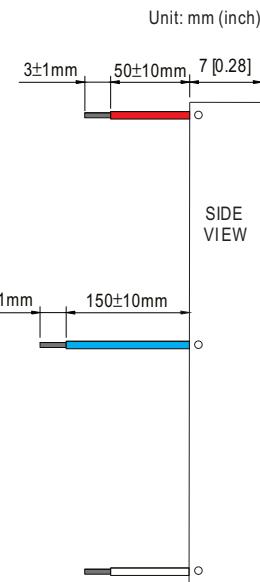
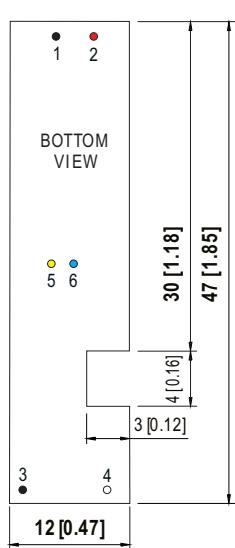




DC-DC Constant Current Step-Down LED driver

LDDS-H series

## ■ Mechanical Specification



Unit: mm (inch)

## ■ Pin Configuration

Pin No.	Comment
1	-Vin (Black) Don't connect to -Vout
2	+Vin (Red) DC Supply
3	DIM(-) (Black) Connect to -Vin
4	DIM(+) (White) ON/OFF control or 3 in 1 Dimming
5	+Vout (Yellow) LED + Connection
6	-Vout (Blue) LED - Connection

NOTE: All wires UL3385 22AWG/300V/105°C rated