

(Track adapter application)



## ■ Features

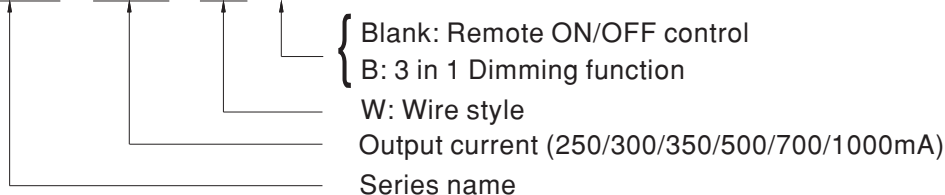
- DC/DC step-down converter
- Constant current output: 250mA to 1000mA
- Wide input voltage: 12 ~ 56VDC(48V typ.)
- Wide output LED forward string voltage: 2 ~ 45VDC
- High efficiency up to 96%
- Built-in EMI filter, comply with EN55015.
- 3 in 1 dimming and remote ON/OFF control.
- Protections: Short 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 th heat dissipation allows this series to fit for class III commercial track light or DC bus lighting application.

## ■ Model Encoding

LDDS - 250 H W B



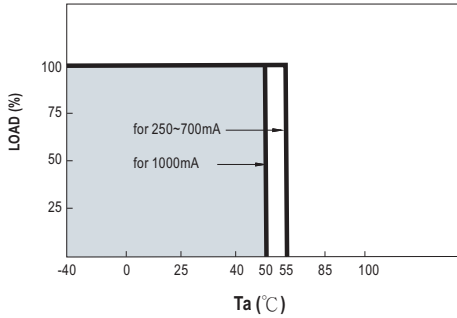
## ■ Applications

- DC battery source lighting
- Portable lighting
- Commercial lighting
- DC 48V Track lighting
- DC 24V landscape lighting
- For STUCCHI track adapters
- For  $\text{III}$  class III application(SELV)

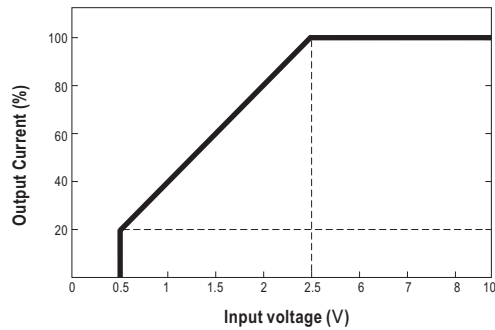
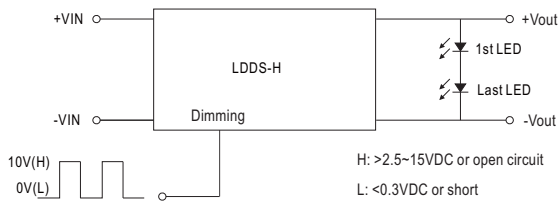
**SPECIFICATION**

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 <small>Note.4</small>	2 ~ 45VDC						
	CURRENT ACCURACY (Typ.)	±5% at 48VDC input (or 24VDC)						
	RIPPLE & NOISE(max.) <small>Note.2</small>	150mVp-p	150mVp-p	200mVp-p	350mVp-p	350mVp-p	350mVp-p	
	SWITCHING FREQUENCY	40KHz ~ 1000KHz						
	EXTERNAL CAPACITANCE LOAD (max.)	2.2uF						
INPUT	VOLTAGE RANGE	12 ~ 56VDC						
	EFFICIENCY (Typ.) <small>Note.3</small>	94%	95%				96%	
	DC CURRENT	Full load <small>Note.3</small>	200mA	250mA	300mA	400mA	570mA	820mA
		No load	6mA					
FILTER	Capacitor							
REMOTE ON/OFF & 3 IN 1 DIMMING	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)						
3 IN 1 DIMMING	0 ~ 10V / PWM / Resistor Dimming							
PROTECTION	SHORT CIRCUIT	Regulated at rated output current						
		Protection type: Can be continued, recovers automatically after fault condition is removed						
	OVER TEMPERATURE	Tj 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	±0.03% / °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 EN55015, EAC TP TC 020						
	EMC IMMUNITY	Compliance to 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	Expoxy(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**

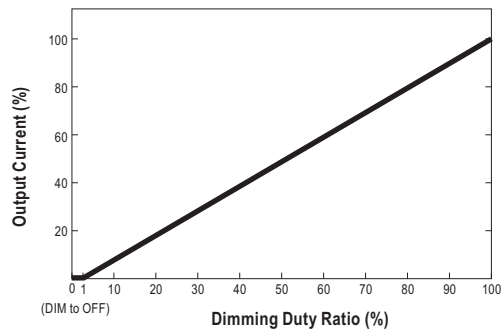
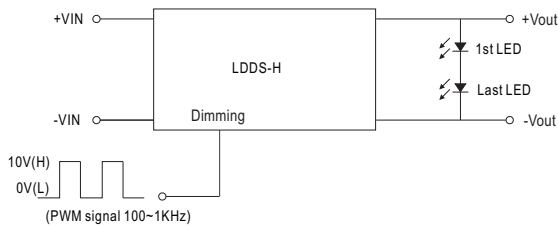


**Standard Application(LDDS-HW series)(Remote ON/OFF control)**

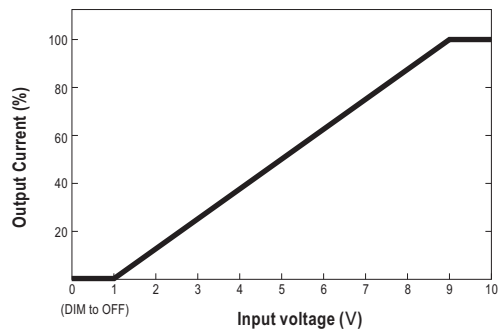
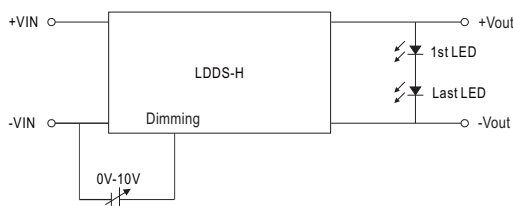


**3 in 1 Dimming Control(LDDS-HWB series)**

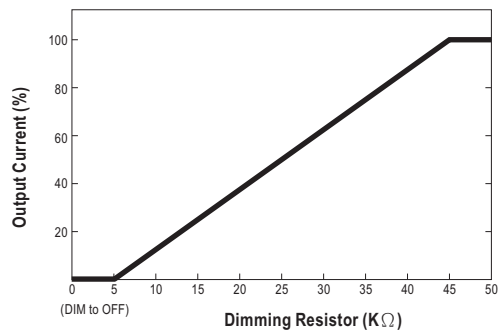
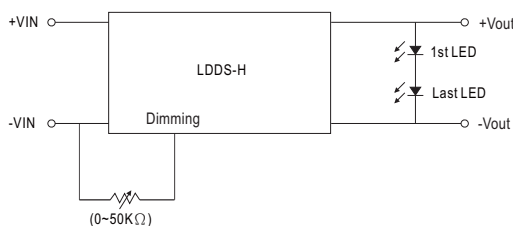
© Applying additive 10VDC PWM signal



© Applying additive 0~10VDC

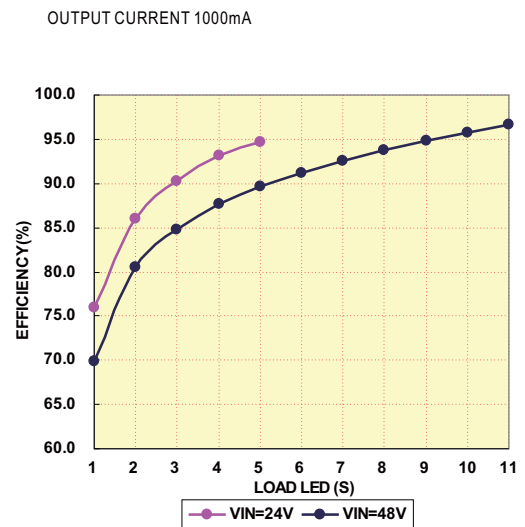
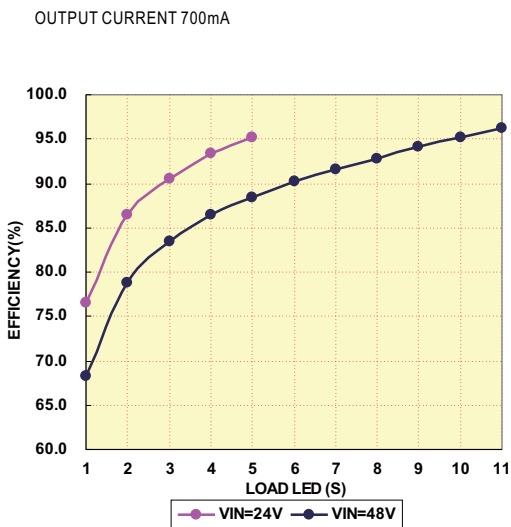
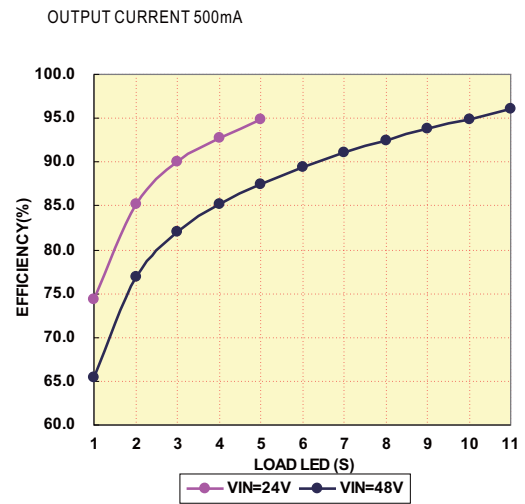
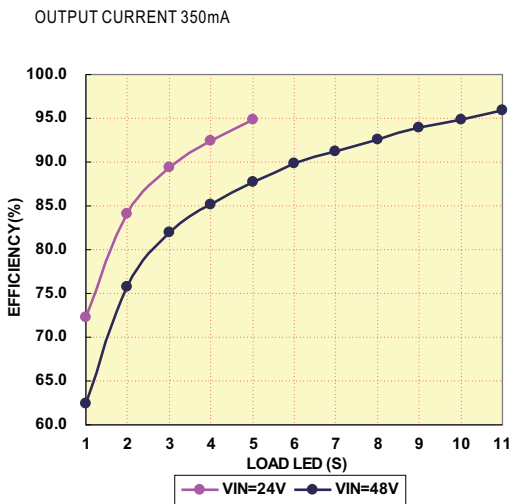
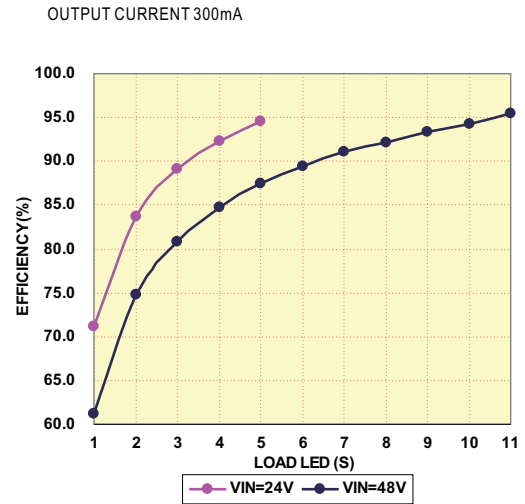
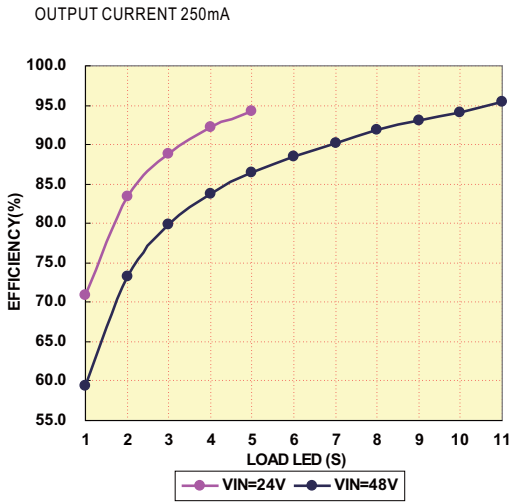


© Applying additive resistance

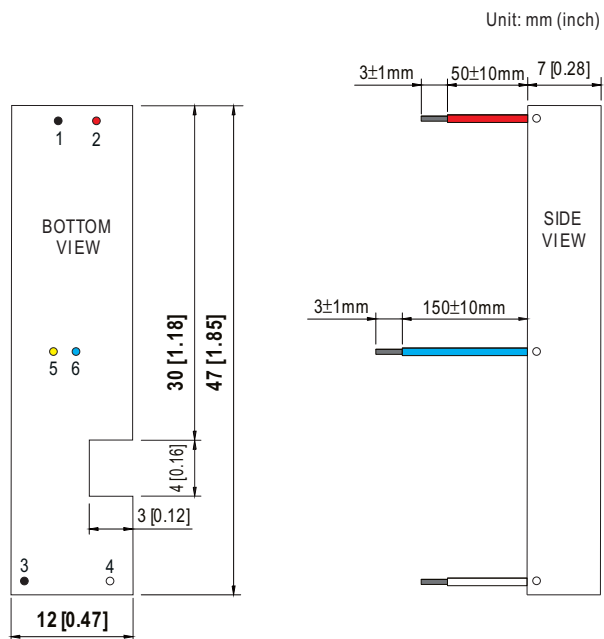


(Dimming source current from power supply:200μA)

■ Efficiency VS Output Voltage(Number of LEDs)



**Mechanical Specification**



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

**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