



# L80 10W - MDD3



PREMIUM indoor LED driver with three dimming protocol from 0/1-10V, Phase and resistor. Configurable output up to 10 Watts. Eye response dimming curve with deep & smooth down to 1%. Smooth ON/OFF.

### PRODUCT FEATURES

- Multiple Dimming (0/1-10V, Phase and Resistor)
- 10 Watts
- Optical flicker % <5%
- Perfect Dimming to 1%
- Smooth On/Off
- Eye response dimming
- High Power factor (>0.95)
- MTBF >100K hours
- IP20

### FUNCTIONS

- Configurable Output Power
- Overload protection
- Short-circuit protection
- No-load protection
- Internal Thermal Protection
- LED engine NTC thermal protection
- Hot-pluggable

### TECHNOLOGY BENEFITS

- Multiple dimming protocol and multiple power selection, excellent inventory management
- NTC thermal fold back algorithm protects LED array, COBs from over-temperature while providing regulated reduced light output.
- Our driver allow eight power settings using selectable switch. At each setting, the constant current will be regulated automatically to match the LED Vf strings, make it versatile to driver COB package or a multiple discrete LED arrays at the rated power.

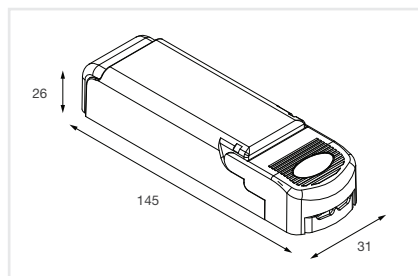
For e.g. a 8 Watts driver with 2 different Vf setup:

- 8W COB with 36V forward voltage, Current will be 0.22 A
- 8W LED strings with 28V forward voltage, Current will be 0.29 A
- Single driver model to cover output power level from 4.5 Watts to 10 Watts, and cover from forward voltage range of 26 to 40V .

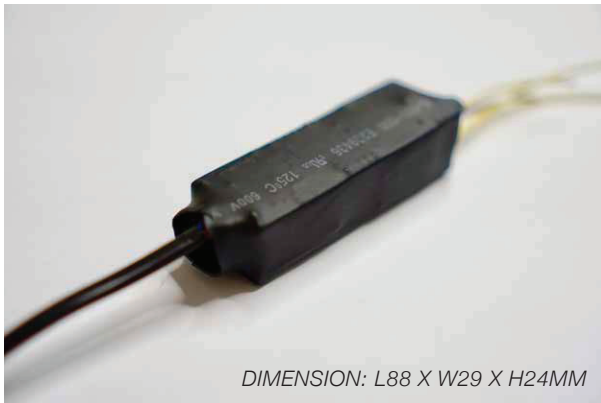
### APPLICATION

- For linear, track light, down light and custom made lighting for indoor retail and hospitality applications

### DIMENSIONS (MM)



**MDD3**  
MULTI-DIM DRIVER  
0-10V | PH | RES



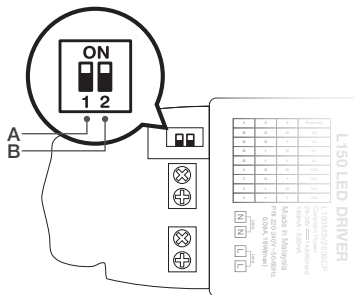
#### INPUT/OUTPUT WIRES

Type	Terminal Colour	Specification	Length
Line	Brown	UL1015 AWG18	150mm
Neutral	Blue	UL1015 AWG18	150mm
Vout+	Red	UI1569 AWG22	150mm
Vout-	Brown	UI1569 AWG22	150mm
AN+	Grey	UI1569 AWG22	150mm
AN-	Black	UI1569 AWG22	150mm
TC+	Orange	UI1569 AWG22	150mm
TC-	Blue	UI1569 AWG22	150mm

OPTION WITH HEATSHRINK PACKAGE FOR OPTIMUM SPACE.  
 (ORDER WITH ADDITIONAL CODE "-HSK" and the output power)  
 \* Output power are not selectable in Heatshrink version.

#### SLIDER SWITCH TABLE

DIP Switch Setting				LED @38V	LED @36V	LED @34V	LED @30V	LED @28V
A (1)	B (2)	Power (W)	Efficiency @ 230V	Current (mA)	Current (mA)	Current (mA)	Current (mA)	Current (mA)
0	0	4.5	73%	0.12	0.13	0.13	0.15	0.16
0	1	6.2	74%	0.16	0.17	0.18	0.21	0.22
1	0	8.0	76%	0.21	0.22	0.24	0.27	0.29
1	1	10.0	75%	0.26	0.28	0.29	0.33	0.36
Support LED Module				LUCENT Module	CREE COB	ELR Module	SORAA lamp / light engine	SORAA lamp / light engine
					LUMINUS CXM 6			
				CITIZEN CRI>90 COB	LUMILEDS COB	CITIZEN COB		LUMINUS CLM-6 27V
					OSRAM COB			



#### MAXIMUM LOADING OF CIRCUIT BREAKERS

Automatic Circuit Breaker Type	B10	B13	B16	C10	C13	C16
Amount of LED drives	27	35	43	40	52	64



## DETAILS SPECIFICATIONS

<b>Input</b>	Rated supply Voltage	220-260 Vac	<b>Protection</b>	Over Load Protection	Yes	
	Input voltage AC	198-277 Vac		Over Temperature Protection	Yes	
	Input Current	0.06A @220Vac		Short circuit Protection	Yes	
	Inrush Current	1.5A 350uS @ 230V/50Hz		Self Recover after Protection	Yes	
	Leakage Current	<0.30 mA @230Vac Full Load		<b>Thermal protection</b>	External NTC thermistor	Throttle @ 80C
	Input No Load Power	<0.5 W			External thermistor value	47Kohm
	THD (at 230V, 50Hz)	<6.5%		<b>Standard &amp; Certifications</b>	Safety	EN 55015
	Power factor	>0.95 @ 230Vac Full Load				EN 61547
	Input Capacitance	~32nF				EN 61000-3-2
	Mains frequency	50Hz/60Hz				EN 61000-3-3
		EN 61347-1, EN 61347-2-13				
<b>Output</b>	LED Output Power	3W - 10W (Configurable)	EMC	CISPR15		
	Output Voltage	26V - 40V (Standard)	RoHS	Yes		
	Current Range	80mA - 360mA (Configurable)	<b>Dimension</b>	Weight	92g	
	Tolerance	+/- 5%		L x W x H	L145 x W31 x H26mm	
	Ripple	<5%	<b>Environment</b>	Ambient Temperature	-20°C - +50°C	
	Optical flicker %	<5%		Working Humidity	0 - 95%	
	Turn On Time	0.5s		Storage Temp/Humidity	-20°C ~ +85°C, 0 ~ 85% RH	
<b>Control</b>	Dimming Protocol	0/1-10V, Phase and resistor	<b>Lifetime</b>	>50,000 hours at Tc, 70°C		
	0/1-10V Dimming Range	<1%-100%		<b>Warranty Period</b>	5 years	
	PHASE Dimming Range	<1%-100% *Depend on dimmer				
	Resistor Dimming Range	<1%-100% with 1M ohm resistor				

## MODEL DATA

Type	Rated Power	Output Forward Voltage ranges	Output Current ranges	Output Power ranges
L80 MDD3 8W 28-36V CP	13.5W	26 - 40V	80mA - 360mA	4.5W - 10W

Current ripple	Optical flicker %	Max. Tc, case temperature	Dimming options	Dimming ranges
>5%	>5%	70°C	0/1-10V, Phase, Resistor	<1% - 100%

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## ORDERING MATRIX CHART

Type	Part number	Unit/carton	Dimension/carton	Weight/carton
L80 MDD3 10W 28-36V CP	L80M3V2836CP	50	31 X 22 X 15 CM	4.6 KG

example: L80M3V2836CP.50