

Approval Marks



Item		Value	Remark	
Input	Nominal voltage		220–240V	
	Nominal frequency		50–60Hz	
	AC voltage range		198–264V	
	DC voltage range (start)		NA	
	DC voltage range (operation)		NA	
	Nominal current		250mA	
	Total Harmonic Distortion (THD)		< 10%	Full load @230VAC
	Power factor		0.7C-0.97	Full load @230VAC
	Displacement factor		0.7C-0.97	Full load @230VAC
	Efficiency		88% (Typ.)	Full load @230VAC
	No-load power		NA	
	Stand-by power		< 0.3W	@230VAC
	Protection class		NA	
Inrush current		16.5A / 20 us	Cold boot 220VAC (0-100% Ipeak)	
Max.units per circuit breaker	Type B , 10A MCB		16	
	Type B , 16A MCB		26	
	Type C , 10A MCB		20	
	Type C , 16A MCB		32	
Earth leakage current		NA		
Nominal voltage range		20-50 Vdc		
Maximum voltage		52 Vdc		
Output	Nominal current range		350-1050mA	DC Output with adjustable constant current from 350 to 1050 mA via NFC in 1mA steps Factory default 350mA
	Current accuracy		± 5%	Full load @230VAC
	Typical output LF current ripple		± 5%	Low Frequency< 120Hz Full load @230VAC
	Starting time		< 0.5 S	Full load @230VAC
	Nominal power range		7-45W	
	Maximum power		47W	
	Color tuning range		1500K-10000K	Adjusted via NFC program Factory default 2000K-10000K

	Item	Value	Remark
Dimming	Dimming control	DALI 、 Bluetooth	Touch Dim
	Dimming range	1-100%	10-100%
	Lowest dimming current	0.5%-2%	7%-13%
	Dimming technique	Hybrid Dimming	O/P current ≥ 100 mA operated @ amplitude mode O/P current < 100 mA operated @ PWM mode
	PWM frequency	2KHz	
	Galvanic isolation	Basic insulated to PRI and double insulated to SEC	
Environment	Ambient temperature range t _a	-20°C - +50°C	
	Maximum case temperature t _c	80°C	
	Max. case temp. in fault condition	110°C	When operating under fault conditions, the temperature of the enclosure at any location should not exceed 110 °C
	Storage temperature range	-40°C - +85°C	
	Relative humidity	10% - 95%	
	Surge transient protection	1kV / 2kV	L-N/L-PE,N-PE
	Environmental rating	Indoor	
	IP rating	IP20	
	Mains switching cycles	> 100,000	
	Expected lifetime	> 50,000 h, t _c 80 °C @ t _a 50 °C > 100,000 h, t _c 70 °C @ t _a 40 °C	0.2 % / 1,000 h failure rate 0.1 % / 1,000 h failure rate
Packing	Gross weight/box	15.4 kg	
	Net weight/box	14.2 kg	
	Pcs/box	48 PCS	
	Dimension/box	415(L)*255(W)*255(H)mm	
Protections			
Short-circuit Protection		Auto recovery	
Open-circuit Protection		Auto recovery	
Overload Protection		Auto recovery	
Conformity & Standards			
Safety standard:		EN 61347-1, EN 61347-2-13, EN 62493	
Performance:		EN 62384	
EMC standard:		EN 55015, EN 61000-3-2, EN 61000-3-3, EN 61547	
DALI protocol standard:		EN 62386-101, EN 62386-102, EN 62386-207, EN 62386-209	
Cable information			
PRI			
Cable cross-section		0.5-1.5□/AWG 20-16	
Stripping		9mm	
SEC			
Cable cross-section		0.5-1.5□/AWG 20-16	
Stripping		9mm	
DALI			
Cable cross-section		0.5-1.5□/AWG 20-16	
Stripping		9mm	
Terminal information			
PRI-Push button/Angled Entry			
SEC-Push button/Angled Entry			
DALI-Push button/Angled Entry			

* If not mentioned, all the test conditions are based on full load at 230VAC input (for 220-240 VAC input).

Subject to change without notice, HEP guarantees all products perform functionally well

Optional product accessories

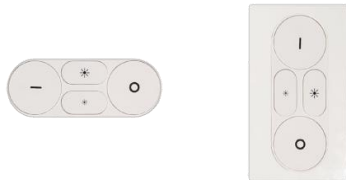
WBDA :



Wiring diagram :



BR-4K :



**For optional model, please check out its data sheet for details of specification.

APP(HEPxIDEA)

Working via WBDA freely control lights to dim up or down, tune warm or cool color by just using a smart phone.

ICON



Main



QR Code

Android



iOS

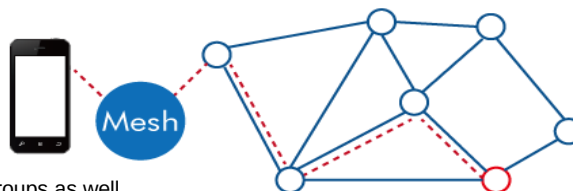


iOS Version :Android 5.0 Up, iOS 10.3 up 6.2

Features:

- 1.Mesh Network totally connecting up to 250 devices
- 2.All devices grouping to 16 groups maximumly
- 3.A group added in total of 30 devices
- 4.A device joined to 8 different groups overall
- 5.Timer preset 4 types of schedule onto individual device and groups as well
6. Maximum 5 scenes available to be determined

Mesh function:



Current adjustable

NFC Reader (optional)

Feature:

Easily on-line read a output current from a driver or write a new current data to a driver throughout HEP NFC reader within few seconds.



APP NFC

Feature:

Quickly check output current of a LED driver simply via Android smart phone, as well as, correct or setup a new current data immediately with no extra equipment at any job site.

ICON



Main



QR Code

Google play

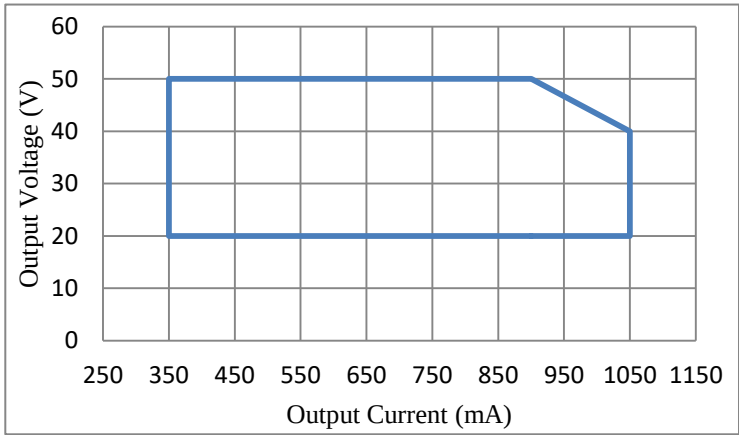
APK



Android 6.0 Up
Smart phone with a NFC function

Electrical Values

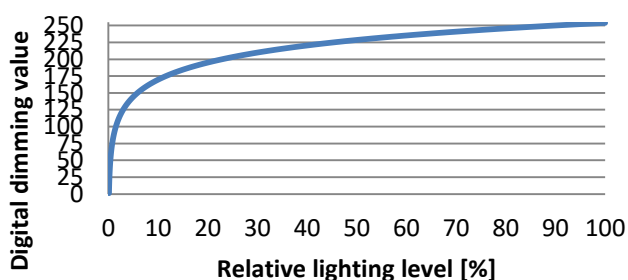
Output Power Range



Output Current (mA)	Output Voltage Range (V)	Output Power Range (W)
1050	20-40	21.0-42.0
1000	20-43	20.0-43.0
950	20-46	19.0-43.7
900	20-50	18.0-45.0
850	20-50	17.0-42.5
800	20-50	16.0-40.0
750	20-50	15.0-37.5
700	20-50	14.0-35.0
650	20-50	13.0-32.5
600	20-50	12.0-30.0
550	20-50	11.0-27.5
500	20-50	10.0-25.0
450	20-50	9.0-22.5
400	20-50	8.0-20.0
350	20-50	7.0-17.5

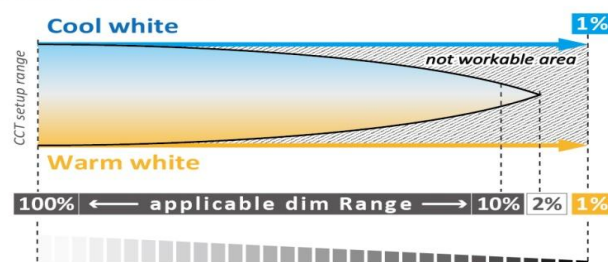
* Upon client's special demand, customized current range in between 350 mA and 1050 mA could be specified as factory default from shipment. This default current range availably revised again via NFC reader program at client's site, if necessary.

Dimming characteristics

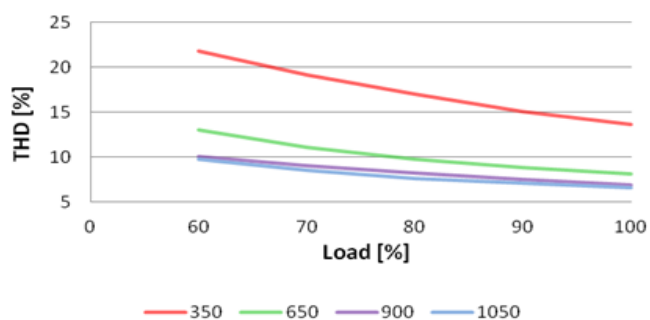


DALI-2 DT8 Control

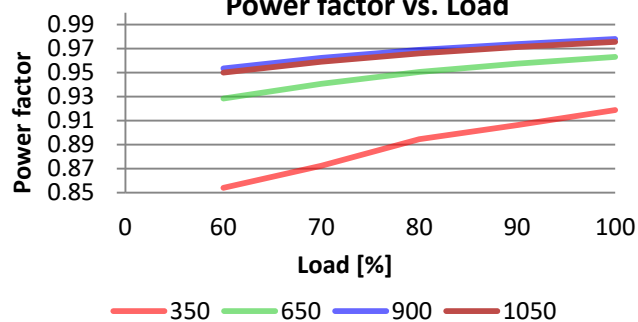
Dimming up/down and CCT tuning are performed independently via DALI-2 DT8 dimmer.



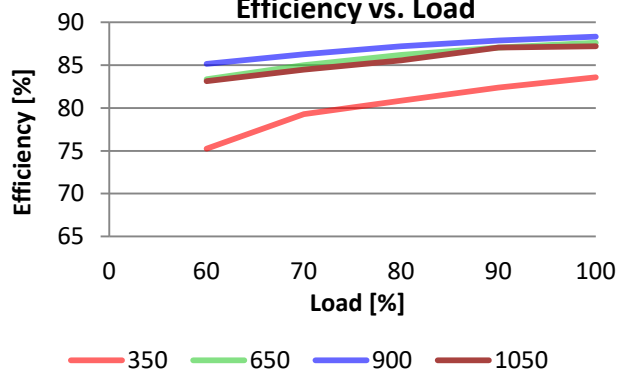
THD vs Load



Power factor vs. Load

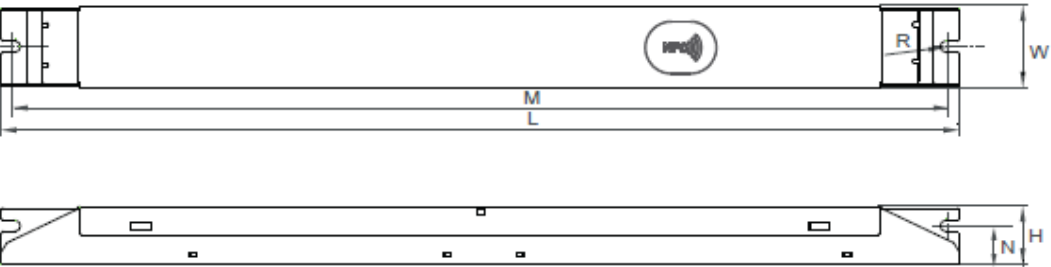


Efficiency vs. Load



Physical

Parameter



L : 360 mm H : 21.5 mm R : 2.1 mm
W 30.4 mm M : 350 mm N : 14.3 mm

Slot On One Side Allowing Alignment : $M \pm 3$ mm

Tolerance : ± 1 mm , R : ± 0.5 mm

Housing Material : Metal, No Sharp Edges
Soldering : Lead - Free, Comply With RoHS
Label : Surface Print

Wiring Diagram

DALI system



TOUCH DIM



“Dimming Warm” via push switch performs dimming up/down and CCT tuning in synchronization, i.e., dimming from max. 100% of cool color continuously down to min. 10% of warm color.

* Remark :

1. Single push switch made parallel connection of maximum 10 pcs of DALI LED drivers in one time.

Touch Dim



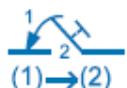
Step 1: Long push (> 0.6 s) until all lamps are switched on the lowest dimming setting level of LED driver.



Step 2: Continuously long push to dim all lights up synchronizely until the desired level, then release push bottom to stop at present light level.



Step 3: Or make long push again for dimming all lights down synchronizely to the desired level, then stop pushing bottom.



Step 4: Short push (< 0.6 s) to make all lamps are switched off.
Step 5: Short push (< 0.6 s) - Push to turn ON/OFF all lamps at the latest setting light level.

Remark: Maximum 10m of cable length from LED driver connecting to light source for DALI/Touch Dim
Maximum cable length of Touch Dim from push switch to LED drivers is 20m.
Single push switch makes parallel connection of max. 10 pieces of LED drivers in one time.

Wiring Diagram with wireless module (optional)

