

Product Features

- 1, Constant current output
- 2, Used with LiFePO4 battery, The battery is supplied separately depending on the operating time like in Table with Emergency Characteristics.
- 3, High Quality of light
- 4, High Reliability
- 5, Low Output Current Ripple
- 6, Isolated
- 7, Internal usage
- 8, Emergency power: 3W
- 9, Input voltage 380Vac protection
- 10, DIP Switch 150/200/250/300/350/400/450/500mA

1) Compliances and Approvals

Approvals	CE EAC
Built-in/independent	Built in
Ingress protection	IP20
Suitable for fixture of protection Class	Class I
Output Safety Level	Isolated
Enviromental	Indoor
Features	Fixed

2) Electric Input Characteristics

	Symbol	Remarks	Min.	Typical	Max.	Unit
Input Voltage						
Rated mains voltage	Vin	Nominal range	220	-	240	Vac
Mains voltage range	Vin.op	operational	195	-	264	Vac
Mains frequency nominal	fn	Nominal range	50		60	Hz
Rated mains voltage	Vin	Nominal range		NA		Vdc
Starting time		@230Vac, full load			500	ms
Input Current						
Input current	Iin	@230Vac, full load		0.22		A
Input inrush current		@264Vac, 50% width		17.8A,286us		A, us
Power Factor	PF	@230Vac, full load	0.95			
Total Harmonic distortion	THD	@230Vac, full load			20	%
System Efficiency	η	@230Vac, full load,full charged		90		%
Input Power						
Input Power	Pin	@230Vac, full load,full charged			45	W
Input Power@ open load		rated input voltage,full charged			3.1	W
Input Power@ standby		rated input voltage		NA		
Dimming						
Dimming type				DIP SWITCH		

3) Electric Output Characteristics

	Symbol	Remarks	Min.	Typical	Max.	Unit
Output Voltage						
Output voltage range	Vo	measured at end of wire	45		115	Vdc
Output voltage @no load	Vo.max	open load		160		Vdc
Output Current						
Output Current	Io		150/200/250/300/350/400/450/500			mA
Default Setting Current	Io		350			mA
Output Current tolerance		@350/400/450/500mA	-5		5	%
		@200/250/300mA	-7.5		7.5	%
		@150mA	10		10	%
Current Ripple		@230Vac (Imax-Imin)/(Imax+Imin)		1		%
Output Power						
Output Power	Po	output performance power			40	W
Isolation						
Isolation	In-Out	3000Vac. for 1min			10	mA

DIP when power on is NOT allowed, please disconnect the AC power before DIP

PIN1	PIN2	PIN3	Uout(V)	Iout(mA)
OFF	OFF	OFF	45-115	150
ON	OFF	OFF	45-115	200
OFF	ON	OFF	45-115	250
ON	ON	OFF	45-115	300
OFF	OFF	ON	45-115	350
ON	OFF	ON	45-100	400
OFF	ON	ON	45-90	450
ON	ON	ON	45-80	500

4) Emergency Characteristics

	Symbol	Remarks	Min.	Typical	Max.	Unit
Emergency Power		Battery fully charged		3		W
Recharge Time				24		Hours
Emergency Periods and battery		@LiFePO4 18650 6.4V 1.5Ah	90			Min
Emergency Periods and battery		@LiFePO4 18650 6.4V 2.0Ah	180			Min
Self-testing				With		

5) Robustness	Symbol	Remarks	Min.	Typical	Max.	Unit
General						
Electric strength	Input-Output	50Hz/60Hz and be applied for 1 min		3000		Vrms
	Input-GND			1480		Vrms
Insulation Resistance Test		500Vd.c. for 1min, For SELV part is 100 Vd.c.	2			MΩ
Reliability						
Rated Life@Tc.max		10% failure			50K	Hrs
Rated Life@Tc.life		10% failure			100K	Hrs
Surge	L-N			1		kV
Surge	L/N-PE			2		kV
Environment Operation						
Ambient temperature	Ta		0		45	℃
Maximum Tcase	Tc.max				80	℃
Tc life	Tc.life				70	℃
Operation Humidity	H.op		10		75	%
Environment Storage						
Storage temperature	T.st		-10		45	℃
Storage Humidity	H.st		10		75	%
Abnormal Condition						
Input Over Voltage		Protected, no damage to driver ^①		380		Vac
Output Short Circuit		Protected, no damage to driver ^②		With		
Output Open load		Output voltage limited to Vo.max ^③		160		Vdc
Too High Ambient Temperature		Protected by built-in thermal protection in controller IC ^④		With		
Input Over Power		Input power should be limited and no damage to driver ^⑤			45	W

- ① If the LED driver connects to Input Voltage 380Vac, then the protection Turn On and the Led driver is switched off until its connect to Input voltage 220-240Vac.
In this protection mode, the led driver does not blink and can be not damage more than 48 hours
- ② Auto Recovery
- ③ Auto Recovery
- ④ The output current decreases
- ⑤ There is risk to damage the LED driver or decreases the life time.

6) Warranty

- Warranty 5 years
- Except for the following circumstance:
 - 1) Improper Installation or operation
 - 2) Misuse
 - 3) Abuse
 - 4) Unauthorized or improper repair alteration
 - 5) Accident or negligence in use, storage, transportation.
 - 6) Any natural destroy
 - 7) Exceed the specifiacion as per the product datasheet
 - 8) The battery needs to be replaced every 12 months, the Customer must install a battery purchased from OSSDAT .

PE	Earth	INPUT  PL-HMEM-040WECC5-000 LED Emergency power supply										 9-10mm 0.5-0.75mm Cable Made in China NingBo Luxdata Electrical Co., Ltd										LED Indicator  Test Switch  Battery  BS  OUTPUT 										
N	Neutral																															
L5	Switched Supply	Emergency Power 3W LifePO4 6.4V 1.5Ah, 30min duration LifePO4 6.4V 2.0Ah - 180min duration The battery is supplied separately																														
L	Un-Switched Supply																															
		Pin 1: Un-Vac Pin 2: Fz.Hz Pin 3: W.V Pin 4: In.A Pin 5: PF Pin 6: Uout.Vdc Pin 7: Umax.Vdc Pin 8: Iout.mA Pin 9: Ta.°C Pin 10: Tc.°C																														
		220-240 50/60 45 0.22 0.95 45-115 160 150-500 0...45 80																														
		Pin11 OFF Pin12 OFF Pin13 OFF Pin14 OFF Pin15 OFF Pin16 OFF Pin17 OFF Pin18 OFF Pin19 OFF Pin20 OFF Pin21 OFF Pin22 OFF Pin23 OFF Pin24 OFF Pin25 OFF Pin26 OFF Pin27 OFF Pin28 OFF Pin29 OFF Pin30 OFF Pin31 OFF Pin32 OFF Pin33 OFF Pin34 OFF Pin35 OFF Pin36 OFF Pin37 OFF Pin38 OFF Pin39 OFF Pin40 OFF Pin41 OFF Pin42 OFF Pin43 OFF Pin44 OFF Pin45 OFF Pin46 OFF Pin47 OFF Pin48 OFF Pin49 OFF Pin50 OFF Pin51 OFF Pin52 OFF Pin53 OFF Pin54 OFF Pin55 OFF Pin56 OFF Pin57 OFF Pin58 OFF Pin59 OFF Pin60 OFF Pin61 OFF Pin62 OFF Pin63 OFF Pin64 OFF Pin65 OFF Pin66 OFF Pin67 OFF Pin68 OFF Pin69 OFF Pin70 OFF Pin71 OFF Pin72 OFF Pin73 OFF Pin74 OFF Pin75 OFF Pin76 OFF Pin77 OFF Pin78 OFF Pin79 OFF Pin80 OFF Pin81 OFF Pin82 OFF Pin83 OFF Pin84 OFF Pin85 OFF Pin86 OFF Pin87 OFF Pin88 OFF Pin89 OFF Pin90 OFF Pin91 OFF Pin92 OFF Pin93 OFF Pin94 OFF Pin95 OFF Pin96 OFF Pin97 OFF Pin98 OFF Pin99 OFF Pin100 OFF Pin101 OFF Pin102 OFF Pin103 OFF Pin104 OFF Pin105 OFF Pin106 OFF Pin107 OFF Pin108 OFF Pin109 OFF Pin110 OFF Pin111 OFF Pin112 OFF Pin113 OFF Pin114 OFF Pin115 OFF Pin116 OFF Pin117 OFF Pin118 OFF Pin119 OFF Pin120 OFF Pin121 OFF Pin122 OFF Pin123 OFF Pin124 OFF Pin125 OFF Pin126 OFF Pin127 OFF Pin128 OFF Pin129 OFF Pin130 OFF Pin131 OFF Pin132 OFF Pin133 OFF Pin134 OFF Pin135 OFF Pin136 OFF Pin137 OFF Pin138 OFF Pin139 OFF Pin140 OFF Pin141 OFF Pin142 OFF Pin143 OFF Pin144 OFF Pin145 OFF Pin146 OFF Pin147 OFF Pin148 OFF Pin149 OFF Pin150 OFF Pin151 OFF Pin152 OFF Pin153 OFF Pin154 OFF Pin155 OFF Pin156 OFF Pin157 OFF Pin158 OFF Pin159 OFF Pin160 OFF Pin161 OFF Pin162 OFF Pin163 OFF Pin164 OFF Pin165 OFF Pin166 OFF Pin167 OFF Pin168 OFF Pin169 OFF Pin170 OFF Pin171 OFF Pin172 OFF Pin173 OFF Pin174 OFF Pin175 OFF Pin176 OFF Pin177 OFF Pin178 OFF Pin179 OFF Pin180 OFF Pin181 OFF Pin182 OFF Pin183 OFF Pin184 OFF Pin185 OFF Pin186 OFF Pin187 OFF Pin188 OFF Pin189 OFF Pin190 OFF Pin191 OFF Pin192 OFF Pin193 OFF Pin194 OFF Pin195 OFF Pin196 OFF Pin197 OFF Pin198 OFF Pin199 OFF Pin200 OFF Pin201 OFF Pin202 OFF Pin203 OFF Pin204 OFF Pin205 OFF Pin206 OFF Pin207 OFF Pin208 OFF Pin209 OFF Pin210 OFF Pin211 OFF Pin212 OFF Pin213 OFF Pin214 OFF Pin215 OFF Pin216 OFF Pin217 OFF Pin218 OFF Pin219 OFF Pin220 OFF Pin221 OFF Pin222 OFF Pin223 OFF Pin224 OFF Pin225 OFF Pin226 OFF Pin227 OFF Pin228 OFF Pin229 OFF Pin230 OFF Pin231 OFF Pin232 OFF Pin233 OFF Pin234 OFF Pin235 OFF Pin236 OFF Pin237 OFF Pin238 OFF Pin239 OFF Pin240 OFF Pin241 OFF Pin242 OFF Pin243 OFF Pin244 OFF Pin245 OFF Pin246 OFF Pin247 OFF																														

Connection		Signal	Cable Description	Remark
	Input	PE	0.5-0.75mm^2	grey, push-in terminal
		N	0.5-0.75mm^2	grey, push-in terminal
		LS	0.5-0.75mm^2	grey, push-in terminal
		L	0.5-0.75mm^2	grey, push-in terminal
	Output	-	0.5-0.75mm^2	black, push-in terminal
		+	0.5-0.75mm^2	red, push-in terminal
Connection Marking				Yes

Emergency Power LED

LED charging indicator & test switch
Length:300mm

Battery pack line length:
Red&Black 260mm

LiFePO4 6.4V/ xxxx mAh

Neutral
A.C.Line

1 2 3 4

LED-
LED+

LED load

wire preparation
0.5-1.5mm
7-8mm

Note:User can connect external 6.4V LiFePO4 battery outside of housing for different time

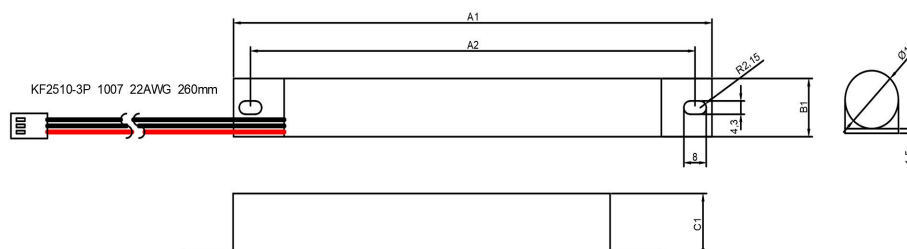


LED indicate

Test switch

Technical drawing of the KF2510-3P connector. The drawing shows the connector body with dimensions A1, A2, and B1. The cable is labeled KF2510-3P 1007 22AWG 260mm. The cable has a length of 260±5mm. The connector body has a width of 20mm and a height of 4.3mm. The cable is shown with a 3-core shielded structure.

L	W	H	M	
184(A1)	19.5(B1)	20.5(C1)	165(A2)	mm
105				gram
132				pcs
43*23*17				cm
14.5				kgs



- LiFePO4 18650 battery core
- Battery voltage 6.4V
- Rated 1500 charge/discharge cycle
- Max.short term temperature 70℃
- Ambient temperature 0℃to+45℃
- Two wires:1 red and 2 black
- Length: 260mm
- The battery needs to be replaced every 12 months
- To guarantee the rated discharge time,please charge the battery for at least more than 12 hours.
- Charge and discharge cycle needs to be done at least once every three months,and the continuous charging time can not exceed 3 months.

11) Directives / Test Standards

Safety

EMC

Directives / Test Standards

IEC61347-1、IEC61347-2-7、IEC61347-2-13、IEC60598-2-22

EN55015、CISPR15、EN61000-3-2、EN61547、EN61000-4-2、EN61000-4-3、EN61000-4-4、
EN61000-4-5、EN61000-4-6、EN61000-4-11

12) Addition Remarks

- The LED driver used in combination with the end device is one of the accessories of the whole light fixture, and the EMC of the whole light fixture is not only susceptible to the driver itself, but to the LED light fixture and the whole light fixture's wiring. The manufacturer of LED light fixture should re-confirm the EMC of the whole light fixture before the whole light fixture is finished.

- The luminaire manufacturer is responsible for the correct choice and installation of the LED drivers according to the application and product datasheets.

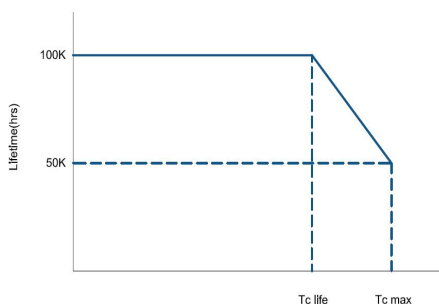
Operating conditions of the LED drivers may never exceed the specifications as per the product datasheet.

- All parameters, if not specified, are measured at 230Vac full loading and 25°C ambient temperature

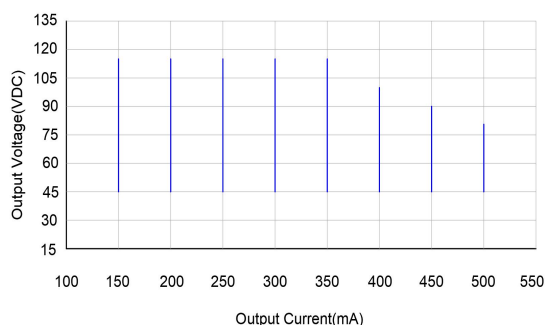
- Do not forget to connect the battery to check the operation.

13) Performance

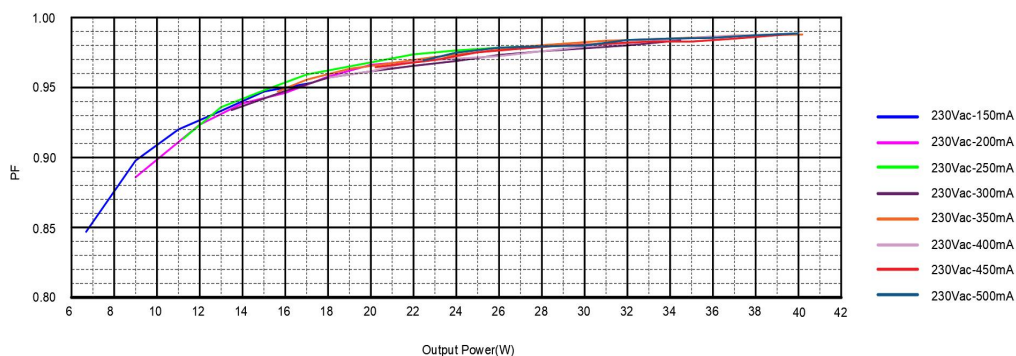
Lifetime vs. Temperature Curve



Operating window



Power Factor Characteristics



Efficiency VS. Load

