

Smart Driver Dual Channel Output



MODELS

- SHLD030L
- SHLD050L
- SHLD060L

FEATURES & BENEFITS

- Universal AC Input Voltage
- Linear form factor, Metal sheet case, Side feed
- Bluetooth control with RF06 module
- Low standby power: <0.5W
- Suitable for indoor use
- Flicker free, excellent camera compatibility
- UL Class 2, UL Class P(E505346)
- Operating temperature: -25°C~+50°C
- Comply IEEE1789, UL8750

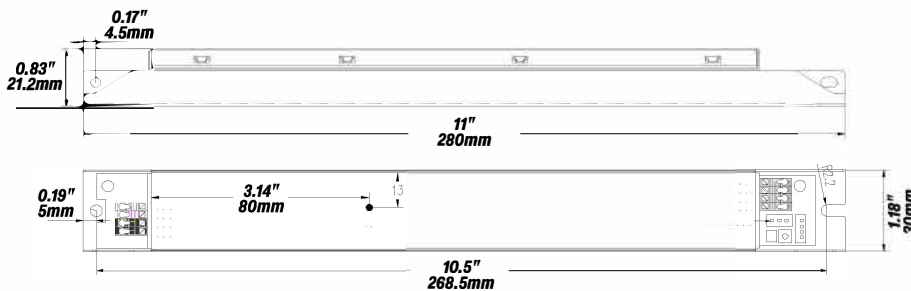
OPTIONAL FUNCTION

- Parallel operation of multiple drivers

MODEL LIST

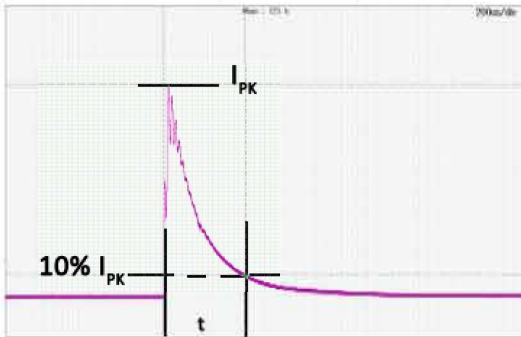
Model Name	Rated Input Voltage	Max Output Power	Default Output Current	Adjustable output current	Rated Output Voltage a
SHLD030L	120-277V AC	30W Max	800mA	80-800mA	20-37V DC
SHLD050L	120-277V AC	50W Max	1400mA	140-1400mA	20-49V DC
SHLD060L	120-277V AC	60W Max	1500mA	150-1500mA	20-40V DC

Unit: inch/mm



SPECIFICATION *The following are SHLD050L parameters

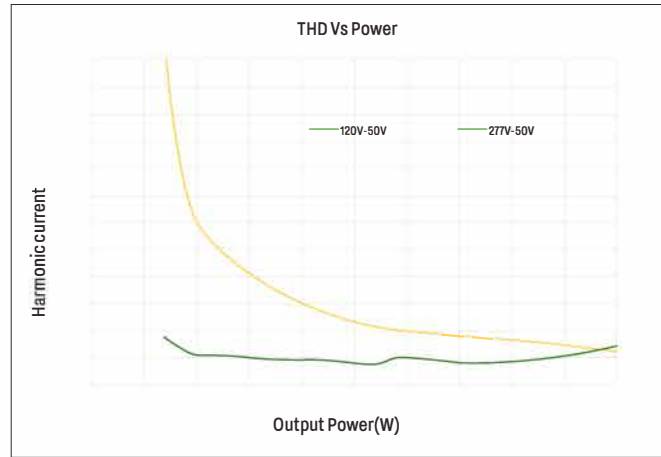
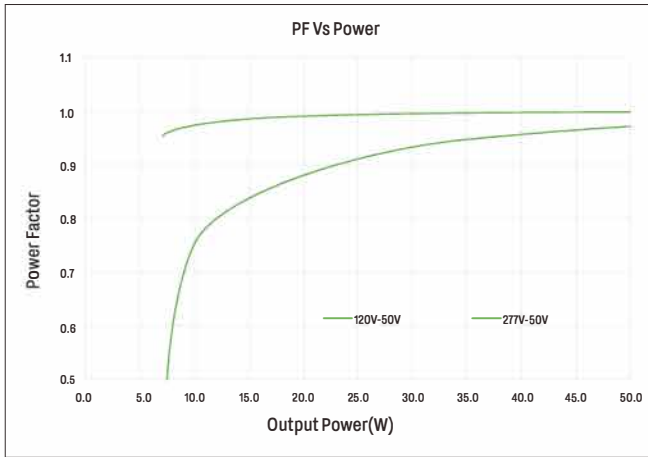
Parameters	Symbols	Test Conditions / Comment	Min	Typ	Max	Units							
MODEL	SHLD050L												
INPUT													
Input Voltage	VIN	/	108	/	305	VAC							
Rated Input Voltage	VIN RATED	/	120	/	277	VAC							
Input Frequency	FLINE	/	47	50/60	63	VAC							
Input Current	IIN	Full Load, VIN = 120VAC	/	/	0.55	A							
Inrush Current	IINRUSH	Cold Start, VIN = 277VAC	/	/	30	A							
Leakage Current	Ileakage	VIN = 277VAC 60Hz	/	/	0.75	mA							
Number of Drivers per MCB(CircuitBreaker)	MCB type	B10	C10	D10	B13	C13	D13	B16	C16	D16	B20	C20	D20
	120VAC	12	14	16	16	19	21	20	23	26	25	29	33
	277VAC	7	12	24	37	16	32	11	19	39	14	24	49



Input Voltage	Inrush Current	t(μs)10%-10%
120VAC	13.8A	156
277VAC	32.4A	152
347VAC	NA	NA

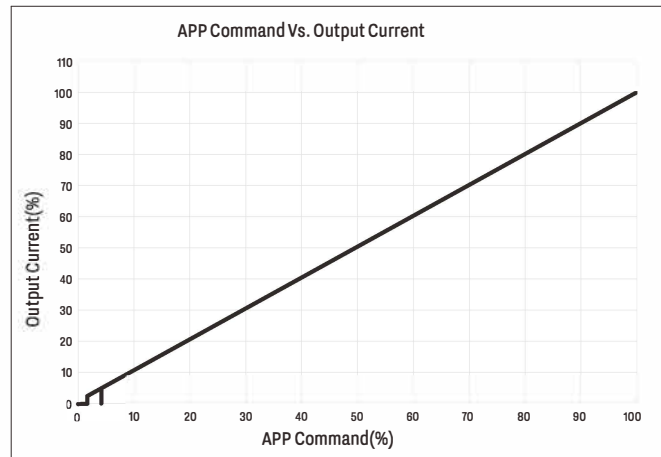
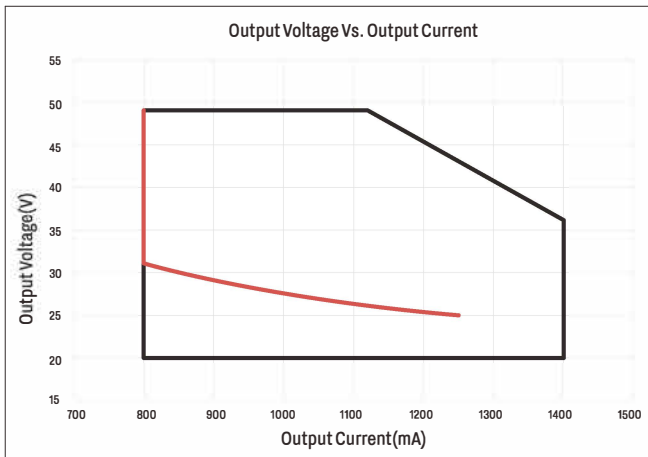
General Characteristics						
Leakage Current	PF	50-100% load, VIN = 120VAC	0.95	/	/	PF
		50-100% load, VIN = 277VAC	0.9	/	/	
Total Harmonic Distortion	TDH	50-100%, VIN = 120-277VAC	/	/	20	%
Efficiency	η	Vout=35.8V, Iout=1400mA, VIN = 120VAC, Steady state	84	86	/	%
		Vout=35.8V, Iout=1400mA, VIN = 277VAC, Steady state	85	87	/	
Turn On Delay Time	Ton_delay	Cold Start, 800-1400mA	/	/	0.5	S

SPECIFICATION



OUTPUT

Parameter	Symbol	Description	10	100	Unit
Output Current Range	IOUT-2CH	Total current	10	100	%
	IOUT-1CH	One Channel	1	100	%
Output current tolerance	t		/	5	%
Output Power	POUT	See "Operating window"	/	50	W
Line Regulation	VOUT-LINE		/	3	%
Load Regulation	IOUT-LOAD	VOUT from MIN. to MAX	/	5	%
Ripple Current	IOUT-RIPPLE_2	Full Load, (I _{omax} -I _{omin})/(I _{omax} +I _{omin}), two channels output together. BW<10KHz	/	30	%
	IOUT-RIPPLE_1	Full Load, (I _{omax} -I _{omin})/(I _{omax} +I _{omin}), One channel output, BW<10KHz	/	10	%
Output Current Overshoot	IOVERSHOOT	Turning Power ON	/	10	%

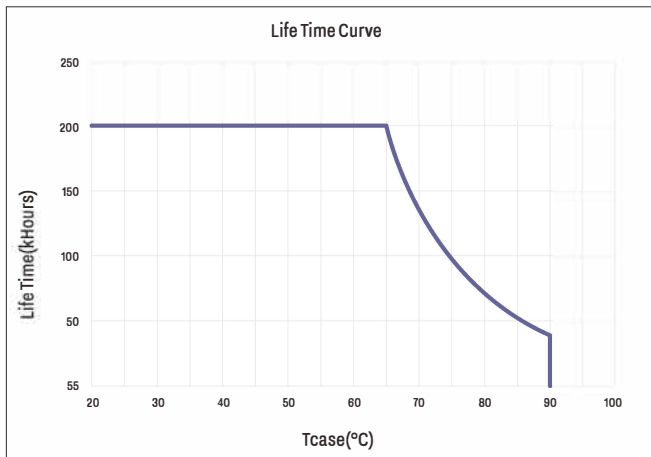


Protection

A Bluetooth module is built in the driver.	
APP link	Please download the app in the data sheet.
Dimming range	10-100% IOUT. (Dim to off).
Parallel operation of multiple drivers	Please contact Litetrace for details.

SPECIFICATION

Protection							
Over Voltage Protection	VOVP	The driver can recover automatically after fault conditions is removed.	/	/	60	V	
Under Voltage Protection	VUVP	The driver can shut down when input voltage lower than VUVP	/	90	/	V	
Short Circuit Protection		The driver can recover automatically after fault conditions is removed.					
Environment							
Storage Temperature	Tstorage	Humidity: 5% RH to 95% RH	-40	/	+85	°C	
Ambient Operating Temperature	Ta	/	-25	/	+50	°C	
Max. Case Temperature	Tc	Hot spot on case	/	/	90	°C	
Operating Relative Humidity	Ha	Non-Condensing	10	/	90	%	
Acoustic Noise	/	Measured from 1 m away	/	/	24	dB(A)	
Cooling	Convection Cooling						
IP Rating	Dry and damp UL approved						
Others							
Life Time	Tlife	Full Load, 85 case temperature, VIN = 120/277VAC	50	/	/	kHrs	
MTBF	TMTBF	Full Load, 25 ambient temperature VIN = 120/277VAC	200	/	/	kHrs	
Net Weight	WNET	Full Load, 25 ambient temperature VIN = 120/277VAC	/	235	/	g	
Warranty	5 Years Warranty at Tc ≤ 85°C						
Flicker	Title 24						



Safety Compliance		
CUL/UL	UL8750, CAN/CSA-C22.2 No. 250.13	
Electromagnetic Compliance		
EMC Requirements	Standard	Conditions
EMI Emissions	FCC Title 47 Part 15	Class A
Voltage Fluctuations and Flicker	IEC61000-3-3	/

TESTING

Electromagnetic Compliance

Immunity Compliance	Standard	Test Conditions
	IEC 61000-4-2	±8kV air Discharge, ±6kV Contact Discharge
	IEC 61000-4-5 or ANSI/IEEE C62.41-2002	±2kV Common and ±1kV Differential Mode, test at 2μs, 5 strikes/1minute interval (40 total strikes)
	ANSI/IEEE C62.41.1-2002	2.5kV Ring Wave, test at 30μs, 7 Strikes/1minute interval, Common and Differential mode, 56 total strikes
	IEC61000-4-11	>95% dip, .5 period; 30% dip, 25 periods; 95% reduction, 250 periods
	IEC61000-4-4	± 2kV Directcoupleto Line input, 5kHz repetition rate, 15ms duration, 300mS period. 7 coupling paths, 1 minute per path (14 total combinations)

Note: Unless otherwise specified, all the above parameters are measured at ambient temperature of 25°C and rated voltage.

TYPICAL APPLICATION FOR TWO SMART DRIVERS

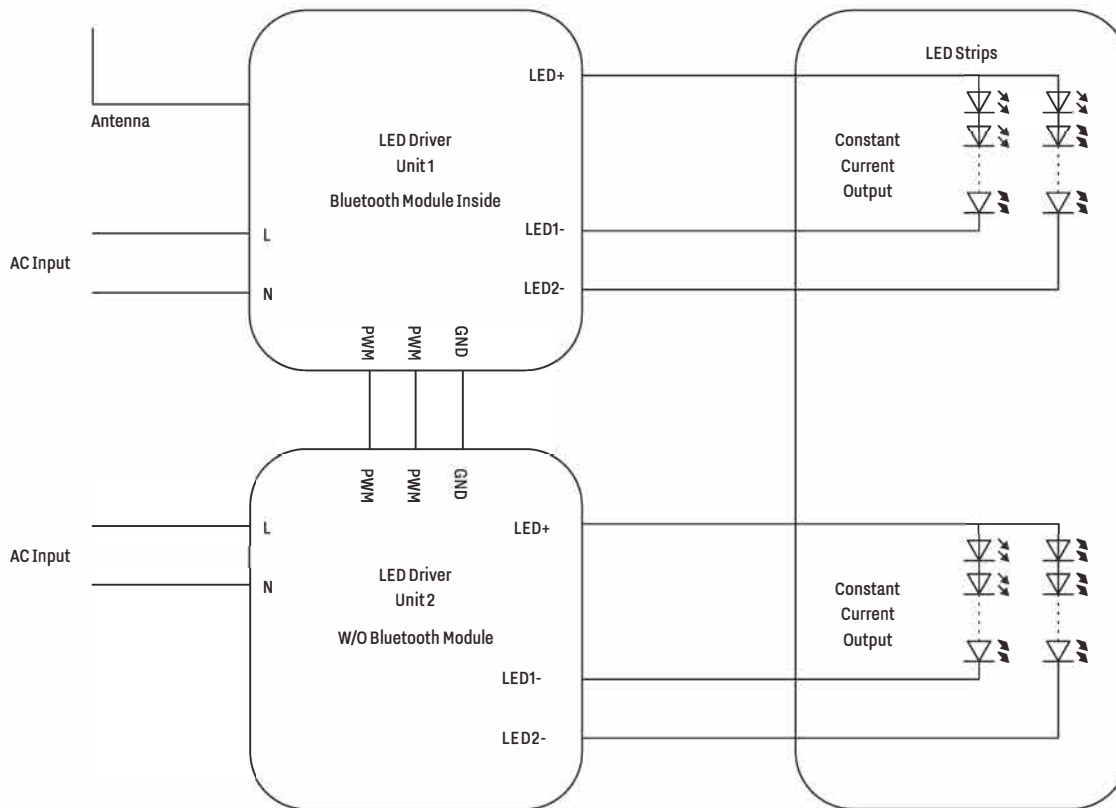


Fig. Typical Application

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