



Distributed by Sunlux



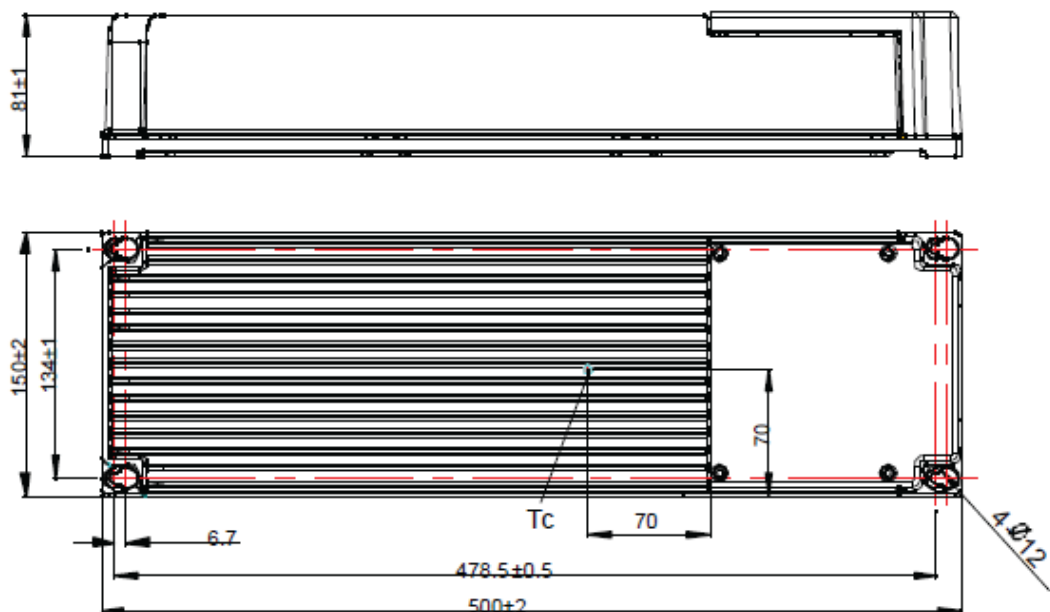
Product Features

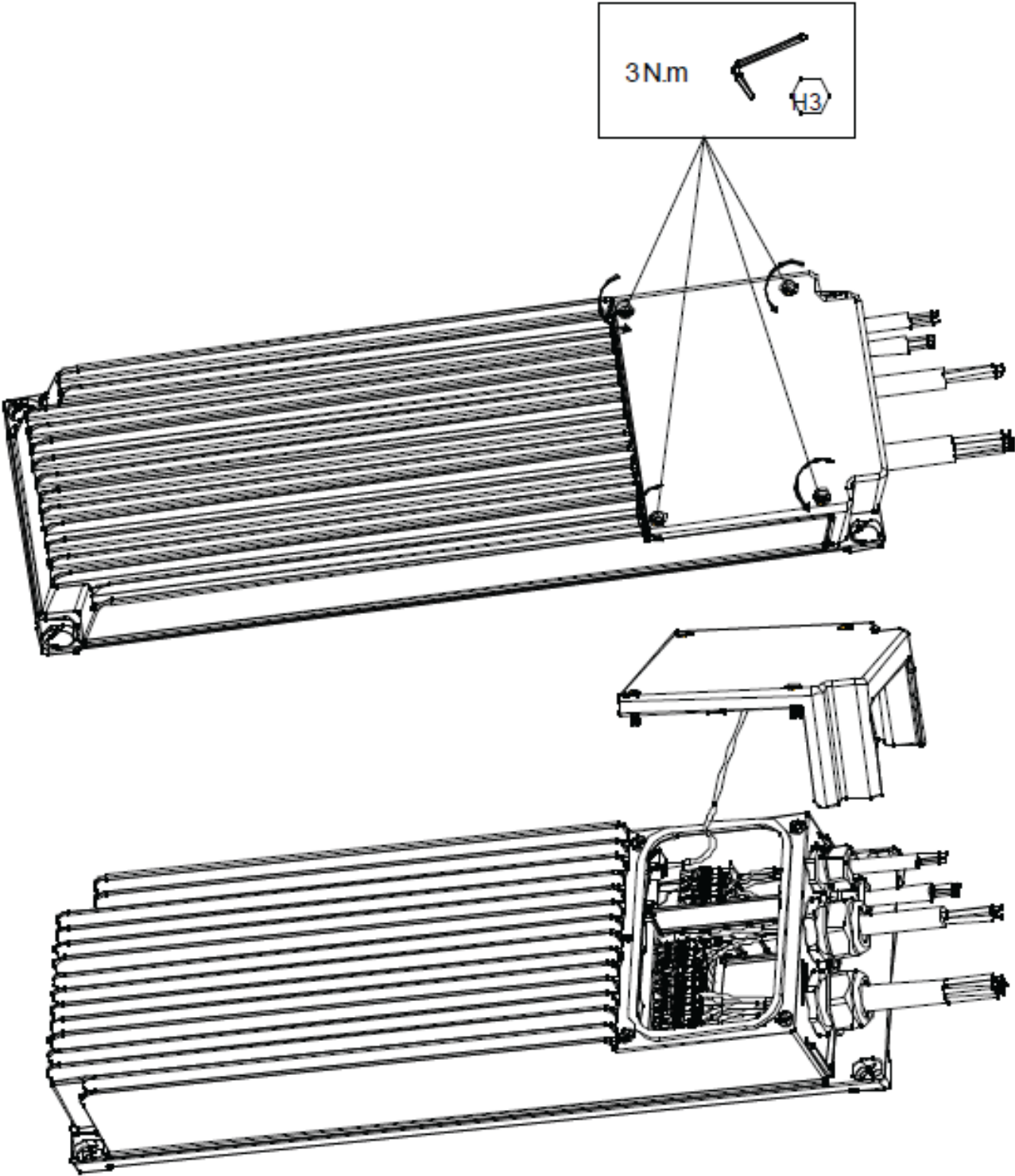
- Universal input voltage / Full range: 198~440Vac IP66
- Constant Power Design
- DMX-RDM control optional, support RDM control mode & controller address setting
- Support flashing function with with maximun of 6 flashes per second
- Non-Isolated class I Driver
- Efficiency up to 97%
- 3*500W channels independtly output
- DMX&DALI-2 Control interface
- dim-to-off, no Glow after dim-to-off
- Max remote distance 300 meters
- Surge protection: 10KV line-line, 10KV line-earth @2Ω. Mutiple protection: SCP, OVP, OTP
- 5 year Warranty
- Best use in, Stadium Lighting, Area and Flood Lighting, High-bay Lighting etc.

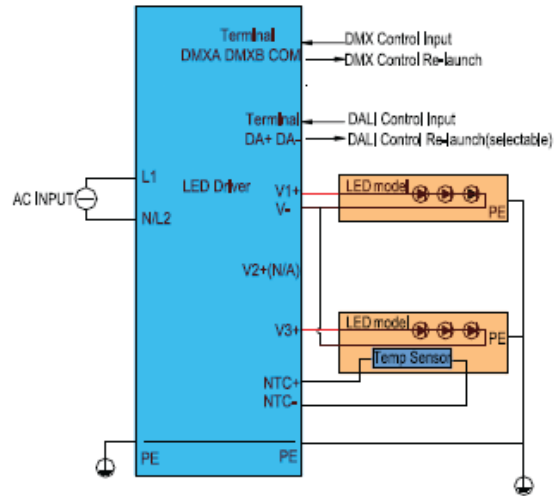
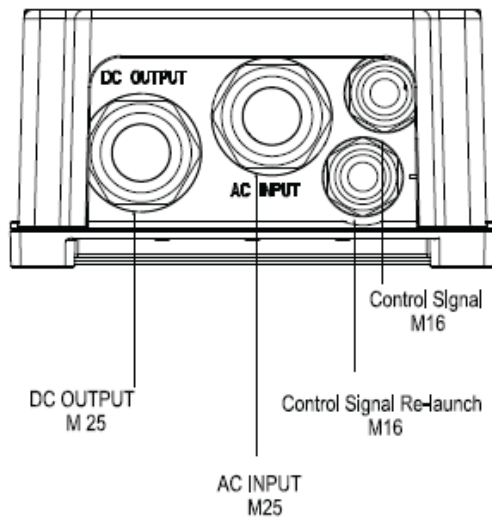
Model N°	Max Output Power (W)	Output Volt. (Vdc)	Input Voltage Range (Vac)	Full Power Output Current Range (A)	Default Current (A)	Typical Efficiency	Power Factor
S6-1K5Y500	500W/Channel	260-500V	198-440Vac	(1.0~1.4A)*3	1.20A*3	97%	0.95

Physical

Size: mm

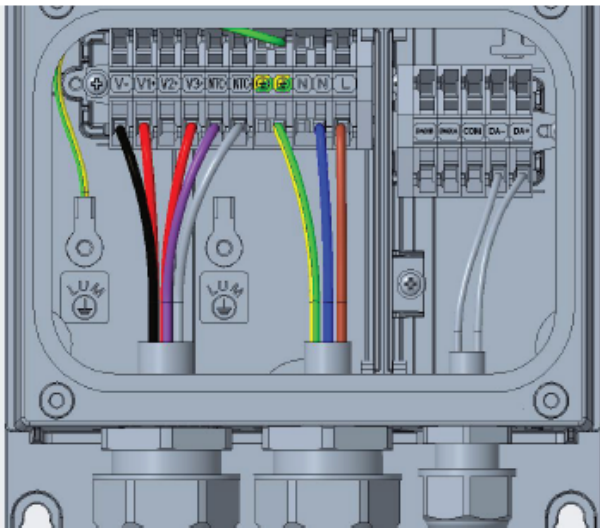




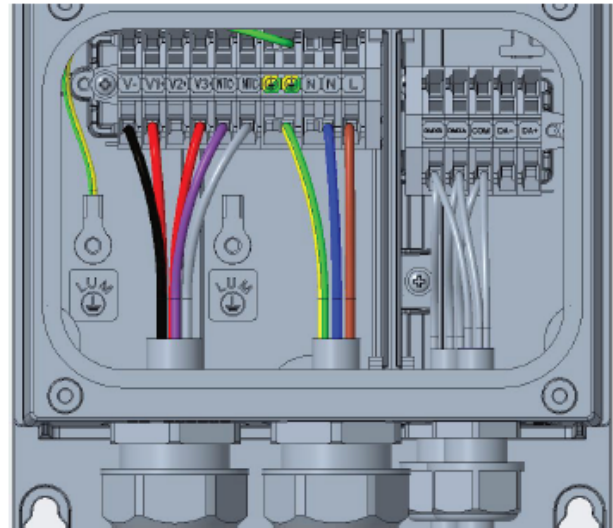


Wire Ports

V1+, V3+ cannot be connected together



DALI Wiring Connection



DMX Wiring Connection

Cautions

1. After the wiring is connected according to the datasheet, ensure that the gland is effectively locked to prevent water from damaging the driver.
2. When closing the electrical cover after wiring, ensure that the four fixing screws effectively tightened to prevent water from damaging the driver.

Specification

General Specifications

Parameter	Description			Notes
	Min.	Typ.	Max.	
Efficiency @220Vac	94.0%	95.5%	—	Measured at full load and 25°C - ambient temperature
Efficiency @277Vac	94.5%	96.0%	—	
Efficiency @347Vac	95.0%	96.5%	—	
Efficiency @400Vac	95.5%	97.0%	—	
Mean time between Failure	—	200Khours	—	25°C+/-10°C ambient temp. 220Va, 80% load
Lifetime	—	50Khours	—	Tc=75°C, 220Vac&100% load
Operating Temperature Ta	-40°C	—	+45°C	220Vac&100% load
Operating Temperature Ta	-40°C	—	+50°C	277Vac&100% load
Operating Tc for Safety Tc_s	-40°C	—	+90°C	
Operating Tc for Warranty Tc_w	-40°C	—	+75°C	Humidity: 10% to 80% RH No Condensation
Storage Temperature Ta	-40°C	—	+85°C	
Altitude	-60m	—	4000m	
Input Under Voltage Protection	150Vac	170Vac	190Vac	
External NTC(R1)	—	18K ohm (Set by Software)	—	When the R-NTC is reduced to R1, the external thermal protection is triggered and the output current gradually decreases
External NTC(R2)	—	9.1K ohm (Set by Software)	—	When the R-NTC is reduced to R2, the output current is reduced to the programmed protection current value
External NTC (Protection Circuit)	10%I _o set	60%I _o set	100%I _o set	10%I _o set>I _o min (Default setting 60%)
External NTC (Protection Circuit)	I _o min	60%I _o set	100%I _o set	10%I _o set<=I _o min (Default setting 60%)
Over Temperature Protection Tc	—	90°C	95°C	Tc; 220Vac&100% load
Short Circuit Protection	—	—	—	Self - recovery
Dimensions (L*W*H)	500" * 150" * 81" mm			
Net Weight	14.10 +/- 0.22 Lbs			

Safety Parameter	CCC	CE/ENE/SAA	UL	Notes
Dielectric Strength (Input - Ground)	2200Vac	2200Vac	2200Vac	60S, Current not exceeding 5mA
Dielectric Strength (Output - Ground)	2200Vac	2200Vac	2200Vac	
Dielectric Strength (Input - Dim)	5150Vac	4400Vac	2200Vac	
Grounding Resistance	0.1Ω (Max)			25°C+/-10°C Ambient Temp. pass 25A Current, 60S
Insulation Resistance	10MΩ (Min)			Input-PE, Output-PE, 500Vdc/60s/25°C

Output Specifications

Parameter	Description			Notes
	Min.	Typ.	Max.	
Output Voltage Range	260Vdc	—	500Vdc	The full power cannot be lower than 300Vdc
Open Circuit Voltage	—	—	600Vdc	The open circuit protection is locked, and the AC needs to be powered on again
Open Current Range	0%	—	100% I _{max}	Dim to off without after glow
Output Current Range	0.50A	—	1.40A	Programmable current range by DALI / DMX programmer
Full Power Current Range V1+/-V-	1.00A	—	1.40A	Common negative pole
Full Power Current Range V2+/-V- V3+/-V-	1.00A	—	1.40A	Common negative pole
Current Accuracy	-3%	—	+3	
Total Output Current Ripple (Pk-Pk)	—	1%	1.5%	20MHz BW, full load & LED load, the ripple would be tiny different under different LED load.
Startup Overshoot Current	—	—	—	No Overshoot
Line Regulation	-1%	—	+1%	25°C +/- 10°C ambient temperature input voltage changes from 220Vac to 400Vac.
Load Regulation	-1%	—	+1%	25°C +/- 10°C ambient temperature input voltage 400Vac. load changes from 80% to 100%
Turn-on Delay Time	—	—	1.5s	220~400Vac & 100% load, load is LED

Input Specifications

Parameter	Description			Notes
	Min.	Typ.	Max.	
Input Voltage Typ	220Vac	230/277/347/400/400Vac	400Vac	
Input Frequency AC	47Hz	50/60Hz	63Hz	
Input Voltage Range	198Vac	–	440Vac	Refer to output power vs input curve
Max Input current	–	–	8.0A	220Vac&Full Load
Max Input Power	–	–	1600W	220Vac&Full Load
Protective Conductor Current	–	–	3.5mA	220-400Vac/60Hz
Inrush Current	–	0.8A(2)S	1.0A(2)S	400Vac, full load 50%-50% peak pulse duration
Inrush Current	–	30A	35A	400Vac&Full Load, Cold Start
Power Factor (PF)	0.97	0.99	–	220-277Vac, 50/60Hz, 100% Load
Power Factor (PF)	0.93	0.95	–	347Vac, 60/60Hz, 100% Load
Power Factor (PF)	0.92	0.94	–	400Vac, 50Hz, 100% Load
Power Factor (PF)	0.94	0.96	–	220-277Vac, 50/60Hz 80% Load
Power Factor (PF)	0.91	0.93	–	347Vac, 50/60Hz, 80% Load
Power Factor (PF)	0.90	0.92	–	400Vac, 50Hz, 80% Load
Total Harmonic Distorsion (THD)	–	5%	15%	220-400Vac, 50/60Hz, 100% Load
Total Harmonic Distorsion (THD)	–	10%	20%	220-400Vac, 50/60Hz, 70-100% Load

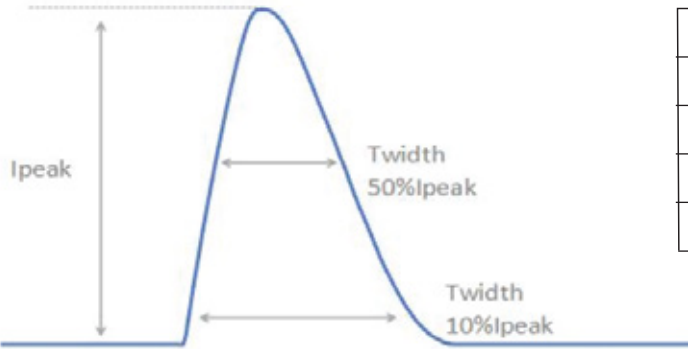
DMX Dimming

Parameter	Description			Notes
	Min.	Typ.	Max.	
DMX+ to DMX-	-6V	–	6V	
DMX+ to Chassis	22M Ohm	–	–	
DMX- to Chassis	22M Ohm	–	–	at 42Vdc
Logic 0 Input	–	–	-0.2V	
Logic 1 Input	0.2V	–	–	DMX+ to DMX-
Communication Baud Rate	–	250K bps	–	
Dimming Output Range	5% Iomax	–	100% Loset	
Dimming Value with turn off	–	–	1	5% Iomax
Dimming Value with turn on	–	–	0	
Flashing times per second	–	–	6	0% - 100% Iset

DALI-2 Dimming

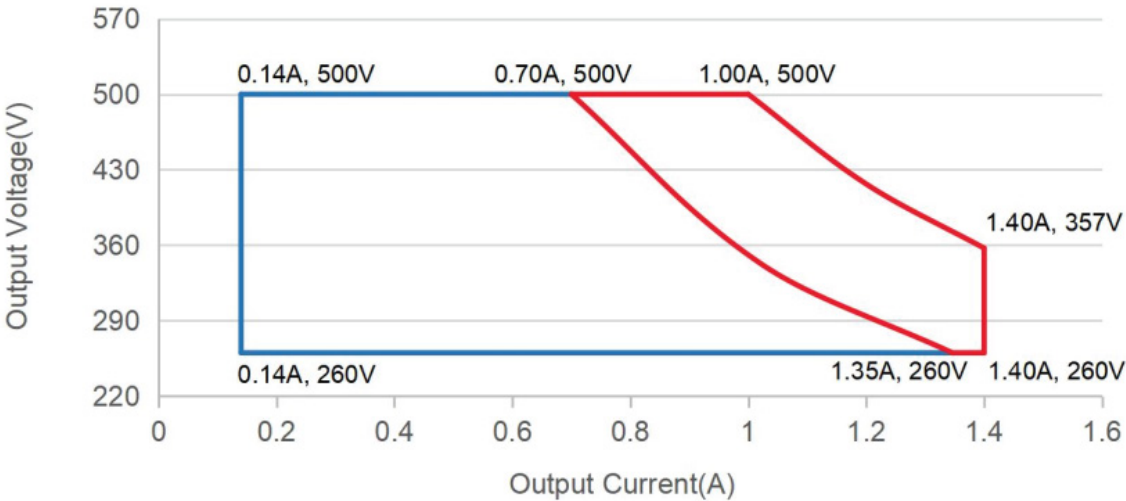
Parameter	Description			Notes
	Min.	Typ.	Max.	
High Voltage Level	9.5V	16V	22.5V	
Lower Voltage Level	-6.5V	0V	6.5V	Return terminal is "DA–"
Dimming Output Current Range	5% Imax	–	100% Imax	Imax = 1.8A
Sink Current	–	–	2.0mA	
Timer Dimming	–	–	–	Traditional, Self-adaption
Output Lumen Compensation	–	–	–	Constant lumen output function

Inrush Current

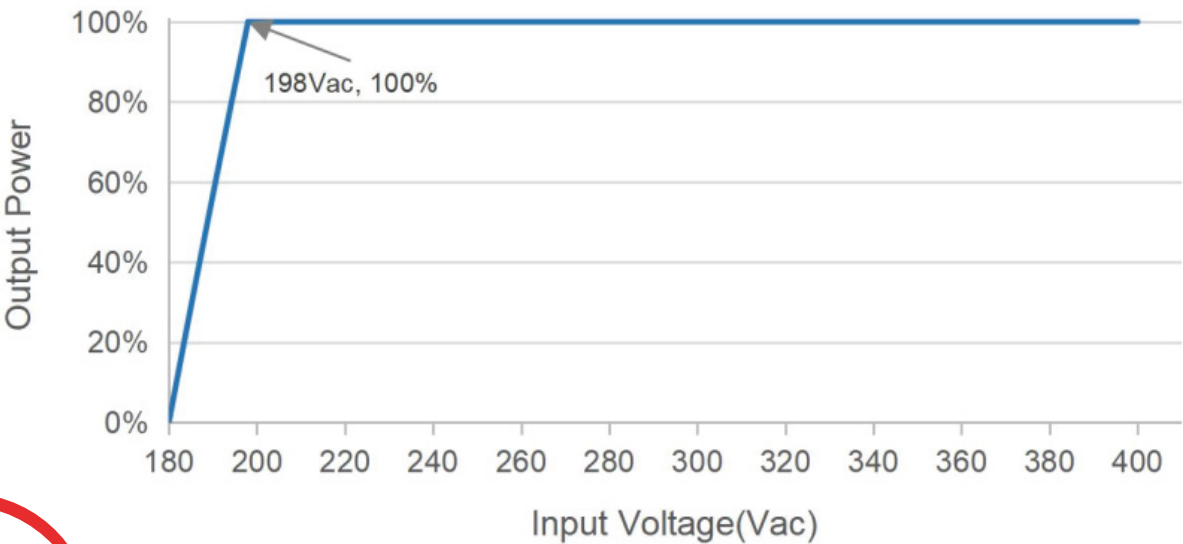


VIN	Ipeak	T(@10% of Ipeak)	T(@50% of Ipeak)
220Vac	20A	3.50ms	1.32ms
277Vac	24A	3.48ms	1.52ms
347Vac	30A	4.32ms	1.95ms
400Vac	32A	2.70ms	0.82ms

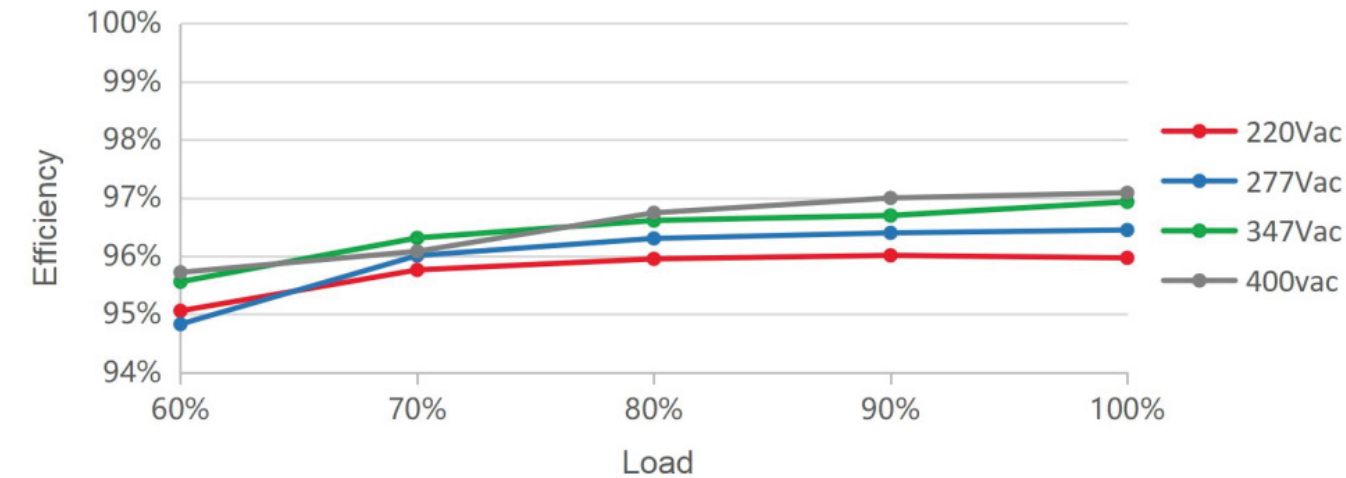
Output Voltage Vs. Output Current



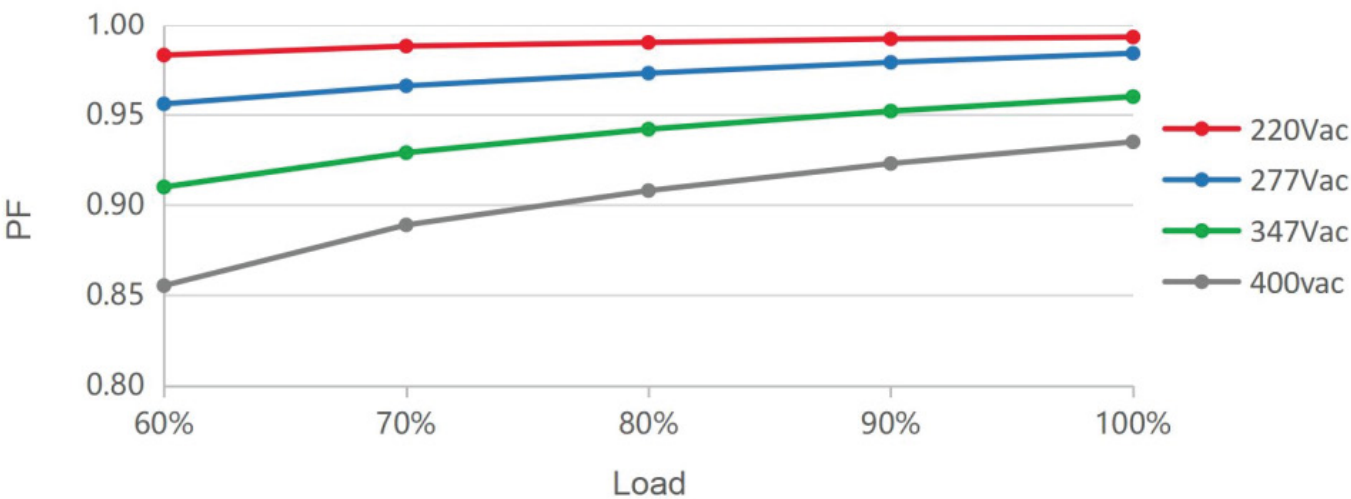
Output Power vs. Input Voltage



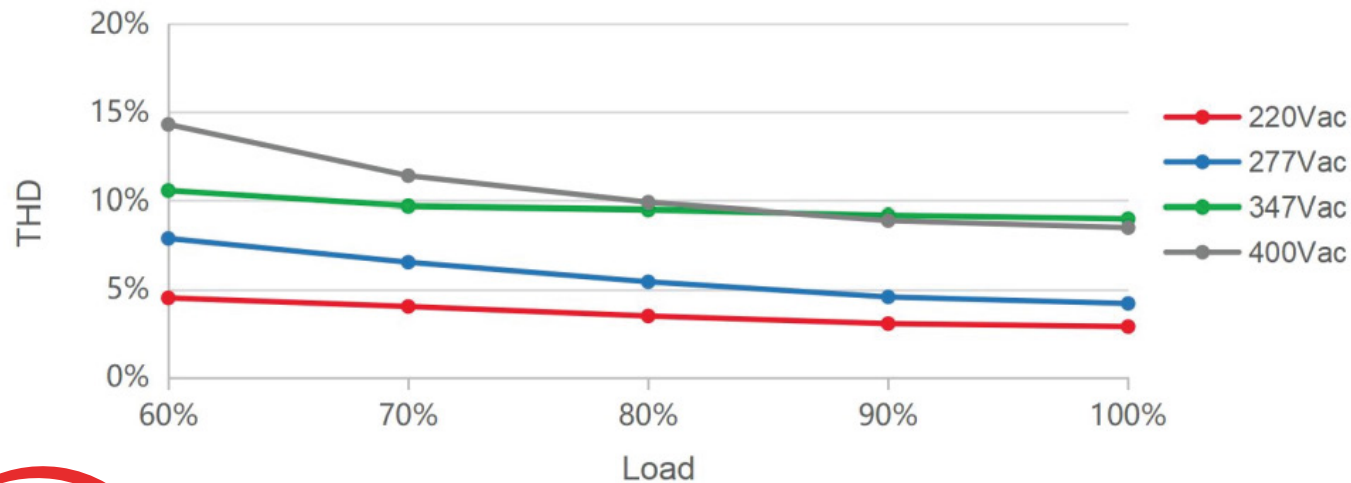
Efficiency vs Load



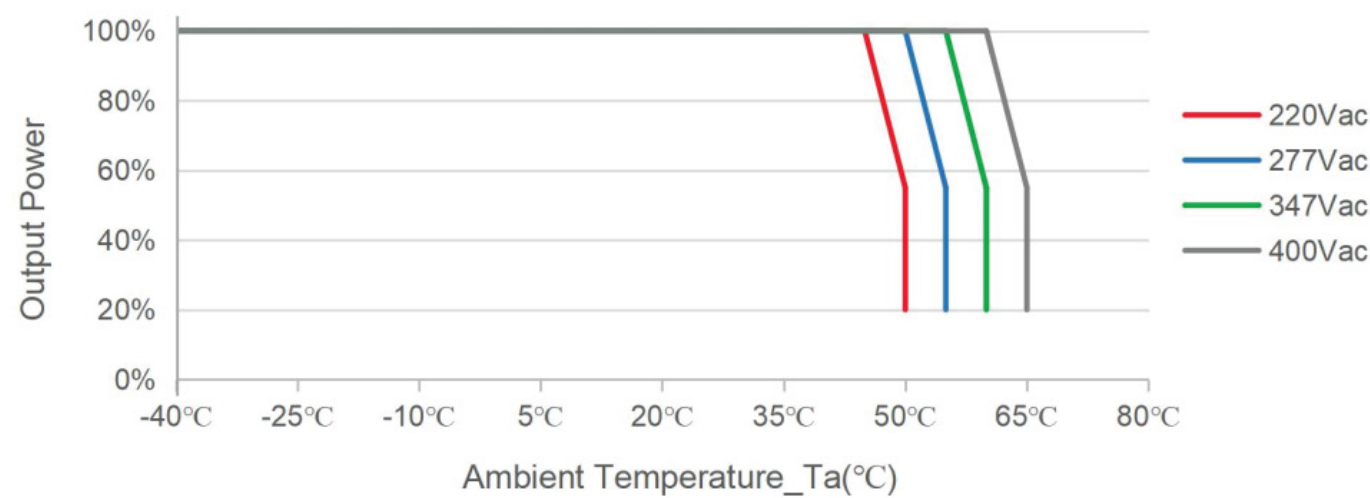
PF vs Load



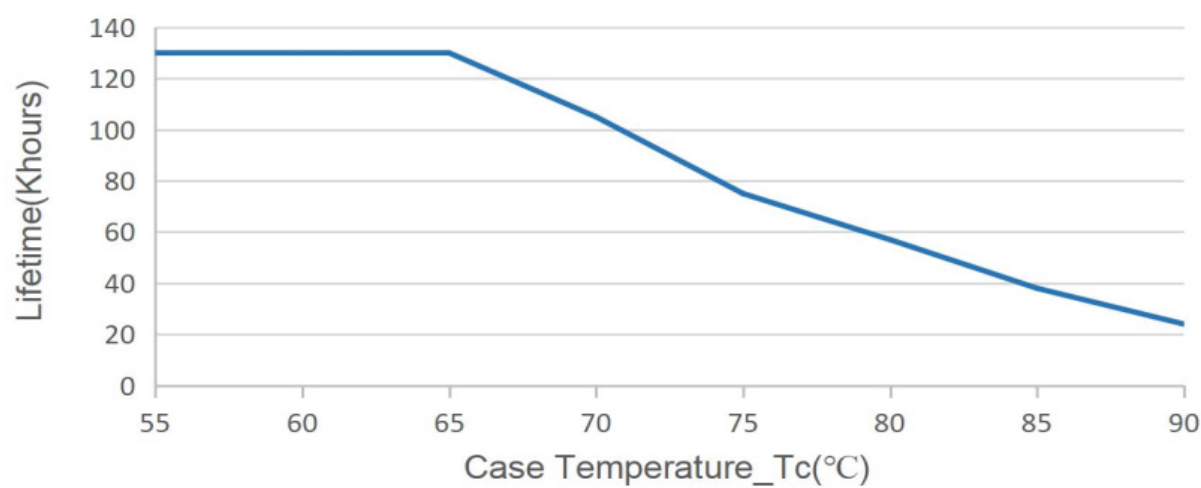
THD vs Load



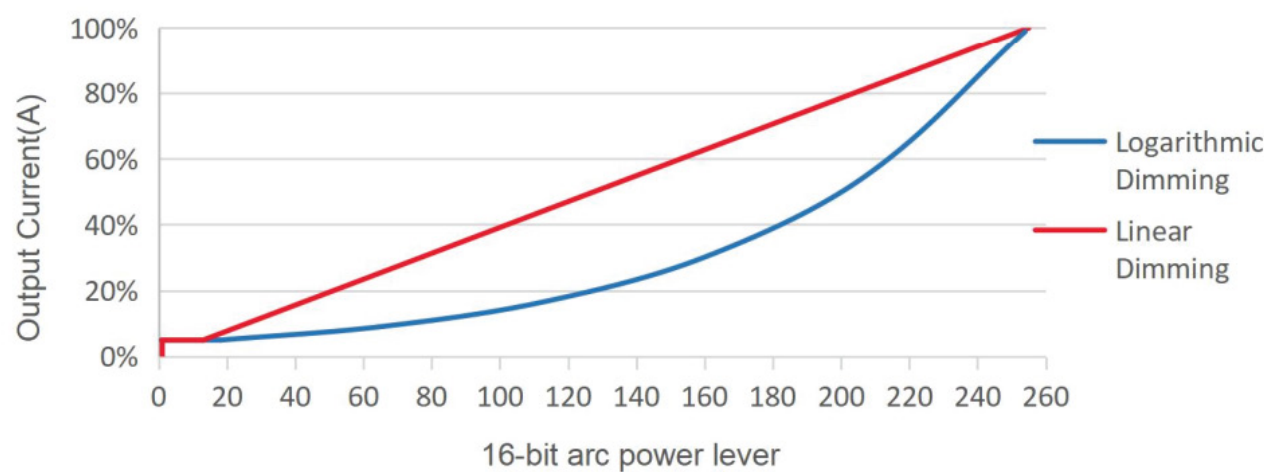
Output Power vs Load Ambient Temperature



Lifetimes vs Case Temperature



DMX Dimming Curve



DALI-2 Dimming Curve

