



**L.T.F**

## All-In-One Dimmable LED UNIdriver - CLASS 2



### 35W DS35W UNIdriver 100-305V Series Constant Current



<b>Efficiency</b>	higher than 85%
<b>Power Factor</b>	>95%
<b>Cast TC*</b>	90°C Max.
<b>Protection</b>	Input / Output
<b>Storage</b>	-30°C / +90°C
<b>Humidity</b>	95% RH Max.
<b>IP Rating</b>	IP 67
<b>Class</b>	Class 2 Power Supply
<b>Dimming</b>	Triac/ELV/0-10V
<b>Output Voltage</b>	700mA-2100mA



FCC Part 15  
Class B compliant



### FEATURES

- All-In-One dimming capabilities; Triac, ELV, and 0-10V dimming
- Universal input voltage; 100-305V AC
- Isolated output power per NEC and UL safety requirements
- UL recognized/ Listed, UL8750, UL1310
- Auto-reset ; Short circuit, Overload and Thermal protection
- Superior thermal performance
- Aluminum case with high W/m.K encapsulating material
- Low profile, small form factor, junction box mountable
- < 30% flicker with excellent dimming range
- Class 2 power supply and other than Class 2 options
- Efficient, high power factor, low THD, FCC Class B

### ELECTRICAL SPECIFICATIONS

Constant Current				
Model #	Input	Output Voltage	Output Current	Available Form Factors
DS35W700C3050UD	100-305V AC 50/60Hz > 0.90 PF < 20% THD	30V-50V DC	700 mA	BF2, SM2, LI2, F3
DS35W750C3046UD		30V-46VDC	750mA	BF2, SM2, LI2, F3
DS35W1000C2035UD		20V-35V DC	1000 mA	BF2, SM2, LI2, F3
DS35W1050C2034UD		20V-34V DC	1050 mA	BF2, SM2, LI2, F3
DS35W1100C2031UD		20V-31V DC	1100 mA	BF2, SM2, LI2, F3
DS35W1400C1525UD		15V-25V DC	1400 mA	BF2, SM2, LI2, F3
DS35W2100C1016UD		10V-16.5V DC	2100 mA	BF2, SM2, LI2, F3

\* Under confirmed thermal condition

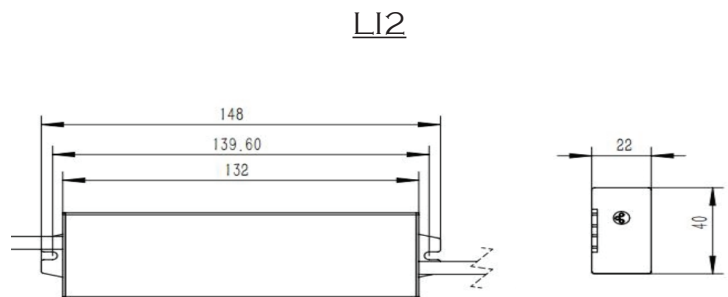
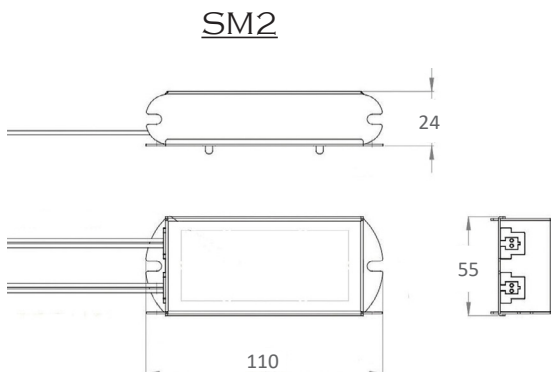
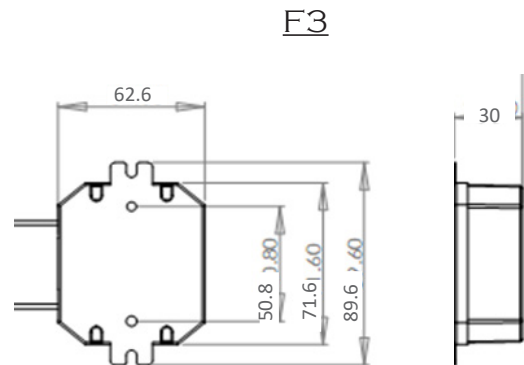


Constant Voltage				
Model #	Input Voltage	Output Voltage	Output Current	Available Form Factors
DS35W12VUD	100-305V AC 50/60Hz > 0.90 PF < 20% THD	12VDC	2916 mA	LS1
DS35W24VUD		24VDC	1458 mA	LS1

Remote Enclosure Option	
Model #	Remote Enclosure
LDS35WXXXXRE	G1
LDS35WXXXXREO	G4

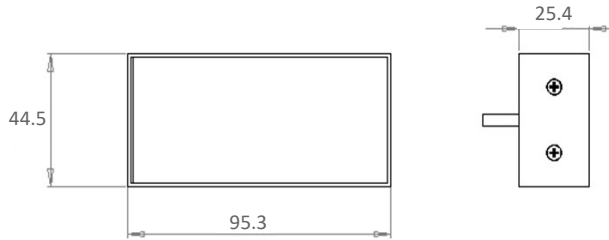
MECHANICAL SPECS.

Available Form Factors	Dimensions
"F3"	71.6x62.6x30mm
"SM2"	110x55x24mm
"LI2"	132x40x22mm
"BF2"	95.3x25.4x44.5mm
"G2"	233.1x85.5x48.9mm
"G3"	280x103x56mm

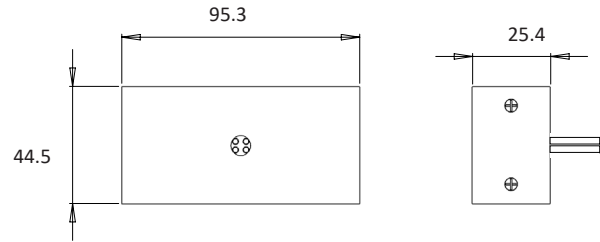




BF2\*



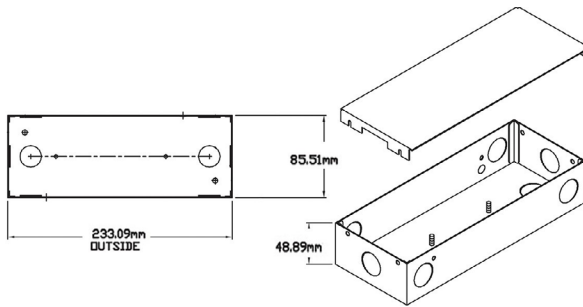
BF1\*\*



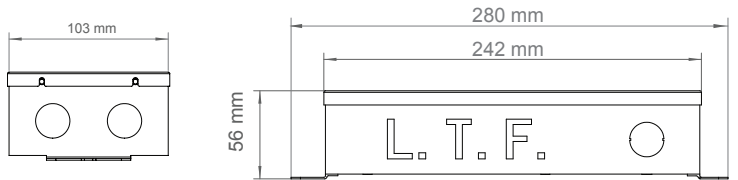
\* With 13mm mounting studs

\*\* Without 13mm mounting studs

G2



G3





## 35W DC Class 2 Power Supply DS35W Series 90-305V



<b>Efficiency</b>	higher than 85%
<b>Power Factor</b>	>92%
<b>Case TC*</b>	85°C Max
<b>Protection</b>	Input / Output
<b>Storage</b>	-40°C / +850°C
<b>Humidity</b>	95% RH max
<b>IP Rating</b>	IP 66
<b>Class</b>	Class 2 power supply
<b>Dimming</b>	0 -10 Dimming
<b>Optional Dimming</b>	Phase Dimming



FCC Part 15  
Class B compliant



### FEATURES

- UL8750, EN61347, UL1310, UL48, cUL, CE, TUV, KAMA, CQC compliant
- FCC Part 15/18 Class B and EN55015 compliant
- Meet the RoHS directive; IP66 compliant,
- Suitable for high-temperature, high-dust location
- Suitable for indoor or outdoor applications
- Suitable in standard electrical junction boxes
- Compact, lightweight
- Single output, ranged from 4VDC up to 114VDC
- Active PFC reduces power consumption
- Isolation between primary and secondary

### ENVIRONMENTAL SPECIFICATIONS

1. Operating temperature: -40 to +60°C
2. Storage temperature range: -40 to +85°C
3. Humidity (non-condensing): 5% - 95%RH
4. Cooling: Free air cooling Convection
5. Vibration Frequency: 5-55Hz/2g, 30 minutes
6. Impact resistance: 1g/s
7. MTBF: 482,000 hours at full load and 40°C ambient conditions
8. EMC:

Compliant to CISPR 22 CLASS B, CISPR 14-1 CLASS B, GB4343. 1-2003, GB17625.1-2003

- Continuous interference voltage test conforming to GB4343-2003+A1, CISPR 14-1: 1997, EN55014-1:1997-5
- Intermittent interference voltage test conforming to GB4343-2003+A1, CISPR 14-1: 1997, EN55014-1:1997-5
- Interference power test conforming to GB4343-2003+A1, CISPR 14-1:1997, EN55014-1:1997-6
- Harmonic currents test conforming to GB4343-2003+A1, CISPR 14-1:EN 61000-3-2:1995
- RF Electromagnetic Field Immunity test conforming to GB/T13926.3, IEC61000-4-3, PrEN55014-2 Section 6.5
- Electrical fast transient/burst immunity test conforming to GB/T13926.4, IEC61000-4-4, PrEN55014-2 section 6.2
- Voltage dips and short interrupts immunity test conforming to IEC61000-4-11
- Voltage variations immunity test conforming to IEC61000-4-11
- Electrostatic discharge immunity test conforming to IEC61000-4-11

\* Under confirmed thermal condition



ELECTRICAL SPECIFICATIONS

- Input range: 90 to 305VAC
- Frequency: 47- 63HZ
- Power Factor: > 92% at full load
- Inrush current: <20A at 25C, 230V, cold start
- Input current: 0.37A at 120V
- Efficiency: 86% (typical at maximum load)
- Maximum power: 35W
- Current accuracy: ±3%, Load regulation accuracy: ±4%
- Optional DC Dimming control: 0-10Vdc, 2mA, 2-wire.
- Optional RD Dimming control: 3-wire 50KΩ Resistance Dimming
- Leakage current: 400uA (typical)
- Hold up time: half cycle
- Output over-voltage protection function: Less than 1.3 times the maximum output voltage;
- Output over-current protection: Less than 1.1 times the maximum output current;
- Output short circuit protection: Unlimited short-circuit, or long-term short-circuit, self-recovery after withdrawal;

Constant Current						
Model #	Output Voltage	Output Current	Current Accuracy	Power Factor	Output Power	Max Efficiency
DS35W0350C	34-100V DC	350 mA	±3%	95%	35W	89%
DS35W0700C	18-54V DC	700 mA	±3%	95%	35W	87%
DS35W1050C	18-36V DC	1050 mA	±3%	95%	35W	86%
DS35W1250C	14-28V DC	1250 mA	±3%	95%	35W	85%

Dimming Guide	
Model #	Dimming Code
DS35W-XX-CXXX-D010	0 - 10 Dimming
DS35W-XX-CXXX-PD	PWM Dimming

Note: refer to 220V input power factor and maximum output. At 120V input and maximum output, power factor is 98%.



Constant Voltage							
Model #	Output Voltage	Max. Output Current	Min. Output Current	Voltage Accuracy	Power Factor	Output Power	Max. Efficiency
DS35W100V	100V DC	350 mA	35 mA	±5%	95%	35W	89%
DS35W54V	54V DC	700 mA	70 mA	±5%	95%	35W	87%
DS35W36V	36V DC	1050 mA	105 mA	±5%	95%	35W	86%
DS35W28V	28V DC	1250 mA	125 mA	±5%	95%	35W	85%
DS35W24V	24V DC	1450mA	130mA	±5%	95%	35W	85%
DS35W12V	12V DC	2900mA	150mA	±5%	95%	35W	85%

### DIMMING SPECIFICATIONS

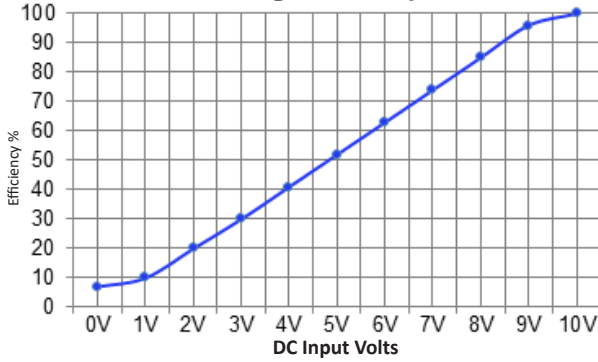
- Optional 0-10V Dimming control:
  - Directness Dimming Mode;
  - Input Voltage Range 0-10Vdc, When Output constant current Adjustable range: 10%-MAX; When input >10V, Costant current output for maximum value; When input ≤ 0V (Include input open circuit), Constant current output for 10%;
  - Input impedance 5KΩ, dimming response time : 20ms;
  - Input Current: MAX. 2mA;

PD 2-Wire PWM Positive Dimming Scheme			
Parameters	Minimum	Typical	Maximum
10V Source Output	9.2V	10.0V	10.8V
Absolute Voltage Range on PWM Input	-2.0V	12V	+28V
Input LOW Level Voltage Range	+2.0V	---	+7.5V
Input HIGH Level Voltage Range	+9.0V	---	+28V

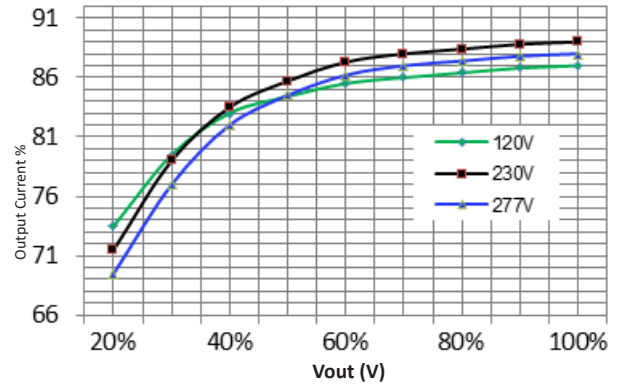


TECHNICAL SPECS.

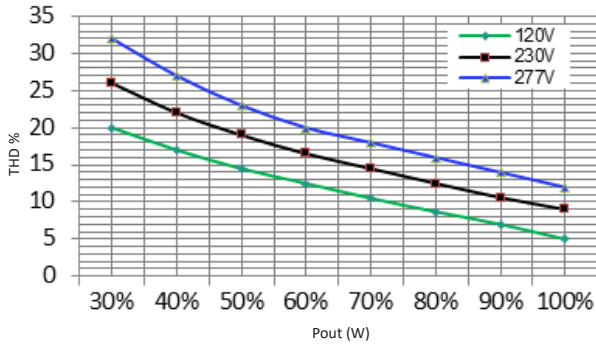
Dimming vs. 0-10V Input



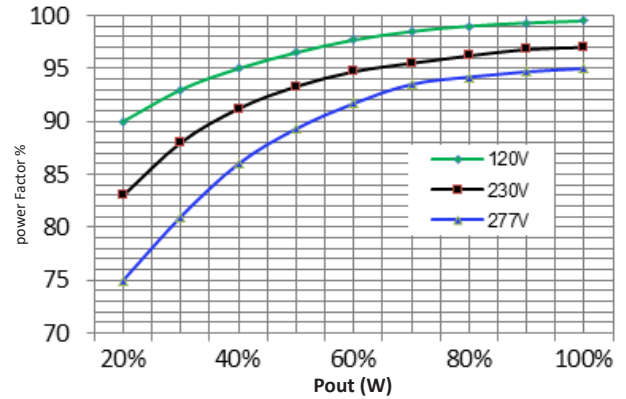
Efficiency vs. Vout at 80°C case



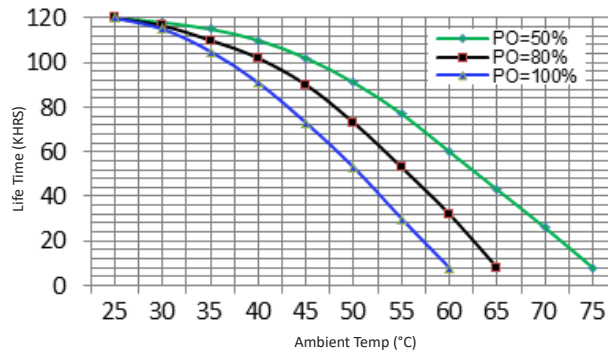
THD vs. Pout



PF vs. Pout at 80°C case



Life Time vs. Ambient Temp



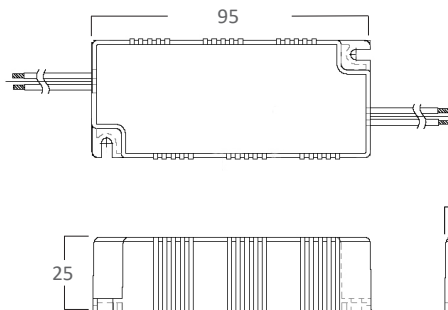
INSTALLATION SPECIFICATIONS

- Plastic enclosure, Used with thermal conductivity and flame retardant glue potting.
- AC input for connection the two core ANSI/UL1015/AWG18 temperature 105 °C core copper wire connection, Cable Length: 150mm, Stripping on the tin: 10mm.
- DC output for connection the two core ANSI/UL1569/AWG14 temperature 105 °C core copper wire, Cable Length: 150mm, Stripping on the tin: 10mm.
- The dimmer control input is the two copper wires, ANSI/UL1569/AWG24 & temperature 105 ° C, Cable Length: 150mm, Stripping on the tin: 10mm.
- Where: 0-10V (or PWM) input — Purple wire, GND — Grey wire.
- This product has two Φ3.6mm mounting holes.

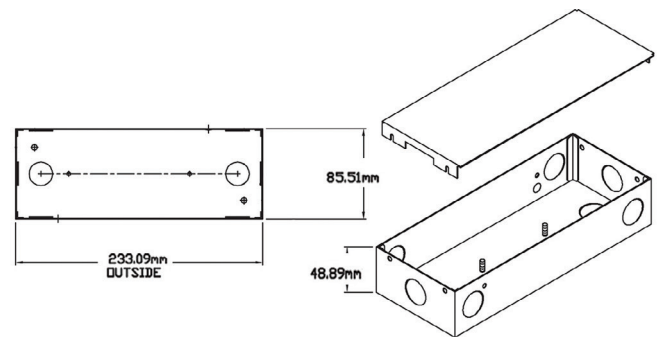
MECHANICAL SPECS.

Available Form Factors	Dimensions
"L5"	95X40.8X25mm
<b>Remote Enclosure</b>	
"G2"	233.1X85.5X48.9mm
"G3"	280X103X56mm

L5



G2: -RE MODELS



G3 : -REO MODELS

