## Features

－High Efficiency（up to 93\％）
－Wide Range Universal Input 90－305 VAC
－Active Power Factor Correction（0．99 typical）
－Constant Current Output
－Dimming Function
－Lightning Protection
－Waterproof（IP67）
－Overcurrent，Overvoltage，Overtemperature Protection
－Meets UL8750 \＆EN61347 Safety
－ 3 Year Warranty

## Description

The LE150S－CD Series operate from a $90 \sim 305 \mathrm{Vac}$ input range．These units will provide up to a 1.4 A of output current and a maximum output voltage of 214 Vdc for 150 W maximum output power．They are designed to be highly efficient and highly reliable．The standard features include dimming control，lightning protection， over voltage protection，short circuit protection，and over temperature protection．

Model Selection

| Model | Output Current | Output Voltage | Efficiency＊ |  | Ripple \＆ Noise＊＊ | Regulation |  | Overvoltage Trip Level |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 110 Vac | 220 Vac |  | Line | Load |  |
| LE150S140CD | 1330 mA －1470mA | 53V－107V | 89\％－90\％ | 91\％－92\％ | 3.2 V pk－pk max． | $\pm 1 \%$ | $\pm 3 \%$ | 128V－161V |
| LE150S70CD | 665mA－735mA | 107V－214V | 90\％－91\％ | 92\％－93\％ | 6.5 V pk－pk max． | $\pm 1 \%$ | $\pm 3 \%$ | 257 V － 321 V |

Notes：1．Efficiency measured at full load，at input voltage noted．
2．Measured at 20 MHz bandwidth，with noise probe directly across output terminals，and load terminated with $0.1 \mu \mathrm{~F}$ ceramic and $10 \mu \mathrm{~F}$ low ESR electrolytic capacitors．

## General Specifications

| AC Input | $90-305 \mathrm{Vac}, 47-63 \mathrm{~Hz}, 1 \varnothing$ | Turn On Time | 2.0 seconds，max． |
| :---: | :---: | :---: | :---: |
| Input Current | $100 \mathrm{Vac}: 1.8 \mathrm{~A}, 220 \mathrm{Vac}: 0.9 \mathrm{~A}$ | Dimming Function | $1-10 \mathrm{Vdc}$ source or External Resistor can be used for dimming control．See below． |
| Inrush Current | 230 Vac ，cold start：will not exceed 65A | Overload Protection | Constant Current |
| Input Fuses | XA，250VAC fuses provided on all models | Short Circuit Protection | Provided－no damage to unit，self－recovery． |
| Earth Leakage Current | ＜0．75mA＠277Vac，50Hz | Overvoltage Protection | Latch mode．AC input will need to be reset to return to normal operation after an OVP condition．See chart for trip range． |
| Efficiency | See Models chart． | Overtemperature Protection | Latch mode．AC input will need to be reset To return to normal operation after an OTP condition．Trip Temperature $=110^{\circ} \mathrm{C}$ typical． |
| Output Power | 150W continuous |  |  |

LE150S-CD

## General Specifications (continued)

| Ripple and Noise | See chart | Operating Temperature | Operating: $\quad-35^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$ <br> Non-operating: $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |
| :---: | :---: | :---: | :---: |
| Output Voltage | See chart | Relative Humidity | $10 \%$ to $100 \%$ operating $5 \%$ to $100 \%$, non-operating |
| Total Regulation | +/- 3\%. See chart | Safety Standards | UL8750, UL935, UL1012, CSA-C22.2 No. 107.1, EN61347-1, EN61347-2-13 |
| Dimensions | W: $3.13^{\prime \prime} \times \mathrm{L}: 9.37^{\prime \prime} \times \mathrm{H}: 1.81{ }^{\prime \prime}$ | MTBF | 340,000 hours ( 1400 mA model, 110Vac input, $80 \%$ load, $25^{\circ} \mathrm{C}$ ambient, per MIL-HDBK-217F). |
| Weight | 1500g | Lifetime | 58,000 hours ( 1400 mA model, at 110 Vac input, $80 \%$ load, $45^{\circ} \mathrm{C}$ ambient temperature). |

EMI/EMC Compliance

| Emissions | EN55015, Radiated \& Conducted with 6db of margin |
| :--- | :--- |
| EMI for Lighting Equipment | EN61547 |
| Static Discharge Immunity | EN61000-4-2, 4kV Contact Discharge, 8kV air discharge |
| Radiated RF Immunity | EN61000-4-3 |
| EFT/Burst Immunity | EN61000-4-4 |
| Line Surge Immunity | EN61000-4-5, 2kV line-line, 4kV line-earth |
| Conducted RF Immunity | EN61000-4-8-6 |
| Power Frequency Magnetic Field Immunity | EN61000-4-11 |
| Voltage Dip Immunity | EN61000-3-2 |
| Line Harmonic Emissions | EN61000-3-3 |
| Flicker Test |  |

Derating Curves



Mechanical Drawing


## Dimming Control

The dimming function shown below uses an internal pull－up resistor，with the output at full load when the dimming leads are not connected（floated）．
Parameters：

| Parameter | Min． | Typ． | Max． | Notes |
| :--- | :--- | :--- | :--- | :--- |
| 10V Output Voltage | 9.8 V | 10 V | 10.2 V |  |
| 10V Output Source Current | 0 mA | - | 10 mA |  |
| Absolute Max．Voltage on the 1－10V input | -2 V | - | 12 V |  |
| Source Current on the 1－10V input | 0 mA | - | 1 mA |  |
| Value of Rin（resistor inside the LED Driver，which is located <br> between the 1－10V input and 10V output | 19.8 K | 20 K | 20.2 K |  |

## LE150SXXXCD

## Dimming Configuration using External Voltage



Dimming Configuration using External Resistance

## Dimming Control Notes:

1. Io is actual output current and Ir is rated current without dimming control.
2. For the driver to operate properly, the load voltage must be maintained above the minimum voltage threshold (approx. $50 \%$ of the max. output voltage for any given model).
3. If the output voltage is maintained above $50 \%$ of the maximum output voltage, the dimming control may be operated over the entire $1-10 \mathrm{~V}$ range with output current varying from $100 \%$ down to practically $10 \%$.
4. The dimming signal is allowed to be less than 1 V , however, when it for $0-1 \mathrm{~V}$, the output current is $10 \% \mathrm{lo}$.
5. The internal resistor Rin is 20 K , and Vcc is about 15 V .
6. Do not connect the GND of dimming to the output; otherwise, the LED driver cannot work normally.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for LED Power Supplies category:
Click to view products by Condor manufacturer:
Other Similar products are found below :
ESS015W-1000-12 EUC-075S105DT PDA-WIFI PIFC-K250F PITB-K222A ALD-514012PJ134 LB240S24KH LMH020-SPLC-000000000017953479535 EUG-200S210DT ESS030W-1050-21 ESS030W-0900-32 BPOXL 4-12-035 SLM160W-3.9-40-ZA ESS010W-018042 ESS010W-0350-24 ESS010W-0200-42 PDA080B-1A0G PDA150B-S1A5G ZPS-20 SLM140W-1.05-130-ZA ESS040W-1400-27 ESS015W-0700-18 ESS010E-0250-42 EDC-100S105SV-0007 79278 EUD-150S350DVA LWA320-C420-ARK-B 50304 HVG-320-36AB HVG-320-54AB OT FIT 50/220-240/300 D L OT FIT 35/220-240/350 D CS L OT FIT 65/220-240/350 D CS L ELEMENT 30/220-240/700 S LC 75W 100-400MA 1-10V LP EXC LCA 35W 150-700MA ONE4ALL LP PRE LCA 50W 100-400MA ONE4ALL LP PRE LCA 50W 3501050MA ONE4ALL LP PRE LCA 50W 350-1050MA 2XCH LP PRE LCI 150/325-1050/300 O4A SL PRE LCA 75W 100-400MA
ONE4ALL LP PRE LCA 45W 500-1400MA ONE4ALL SC PRE LC 50W 100-400MA FLEXC LP EXC LCA 75W 350-1050MA ONE4ALL LP PRE LC 50W 350-1050MA FLEXC LP EXC LC 75W 350-1050MA FLEXC LP EXC LCA 75W 900-1800MA ONE4ALL LP PRE LCA 100W 250-700MA ONE4ALL LP PRE

