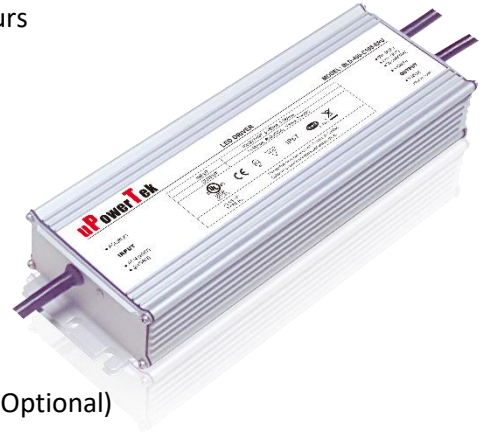


**320W, 100-277Vac Input, NFC Programmable Constant Voltage LED Driver**

■ **Features**

- Supply Voltage: 90-305Vac or 127-420Vdc, 380Vac for 2 hours
- Great Surge Immunity 10kV
- Airset™ NFC Programmability
- PWM Output Frequency >1kHz
- 100,000Hour Life @ Tc=75°C
- 7 Year Warranty @ Tc<=75°C
- 0-10V/PWM/DALI /Push (Switch) /DMX (RDM) Dimmable
- 2% Minimum Dimming Output
- Dim Off with 0.5W Standby
- 12V 300mA Auxiliary Power to Power Controllers and Fans (Optional)
- UL Class P, ENEC/CB/CCC SELV Output
- Safety according to EN 61347-1, 61347-2-3 61347-2-13, 62384



■ **Application**

- Strip lights, Landscape lights, Bay lights, Street lights, Flood lights

■ **Model List**

| Model Number            | Input Voltage Range | Output Power | Output Voltage | Output Current Min | Output Current Max | Certification      |
|-------------------------|---------------------|--------------|----------------|--------------------|--------------------|--------------------|
| BLD-320-V024-XYZ-CP0000 | 90 ~ 305 Vac        | 320 W        | 24V            | 0                  | 13.3A              | UL/FCC/CB/ENEC/CCC |
| BLD-320-V048-XYZ-CP0000 | 90 ~ 305 Vac        | 320 W        | 48V            | 0                  | 6.7A               | UL/FCC/CB/ENEC/CCC |

| XY= | Dimming Method | Programmable | 12Vaux | Dim-off | Programming Range |
|-----|----------------|--------------|--------|---------|-------------------|
| NN  | -              | -            | -      | -       |                   |
| TR  | Timing         | √            | -      | -       | 100%-115%Vo       |
| DN  | 0-10V          | -            | -      | <1.5W   |                   |
| EN  | 0-10V          | -            | √      | <0.5W   |                   |
| ER  | 0-10V          | √            | √      | <0.5W   | 100%-115%Vo       |
| AN  | DALI           | -            | -      | <1.5W   |                   |
| MR  | DMX            | Set Address  | -      | <1.5W   |                   |

Z = U, UL cable with ground wire S, VDE cable/Class I D, VDE cable/Class II

**Note: Dimmable Drivers Do NOT Support Switching DCDC Regulator as Load**

June 21, 2018, All rights reserved.

Website: [www.upowertek.com](http://www.upowertek.com)  
[www.universal-science.it](http://www.universal-science.it)

**320W, 100-277Vac Input, NFC Programmable Constant Voltage LED Driver**
**■ Technical Data**

|                       |  |
|-----------------------|--|
| Input Voltage         | 90~305Vac or 127V-420Vdc, 380Vac for 2 hours   |
| Input Frequency       | 47~63Hz  |
| Power Factor          | >0.9@60-100%load, refer to PF vs. Load curve   |
| THD                   | <15%@60-100%load, refer to THD vs. Load curve  |
| Input Current         | 2.9Amax@120Vac & Full-Load,<br>1.5Amax@220Vac & Full-Load  |
| Inrush Current        | 65A peak, 1.2ms duration, <0.25A2s@230Vac, Cold Start<br>70A peak, 1.3ms duration, <0.5A2s@277Vac, Cold Start                                      |
| Leakage Current       | 1mA max @277Vac 60Hz, UL8750, 0.75mAmax @220Vac 50Hz, IEC61347-1   |
| Input Under Voltage   | Shut down and auto-restart   |
| Input Over Voltage    | *Optional: Shutdown @320Vac  |
| Surge Protection      | Line to line 6kV, line to ground 4kV, IEC 61000-4-5  |
| Voltage Accuracy      | ±3%Vo  |
| Setup Time            | 1.2s max.  |
| Output Overshoot      | 10% Vo, max.   |
| Output Over Current   | 120% Io, typ.  |
| Short Circuit         | Auto recovery. The output recovers when short is removed.  |
| Over Temperature      | Turn off the output when $T_c \geq 105 \pm 10^\circ\text{C}$ ;<br>Auto Recovery When $T_c \leq 70 \pm 10^\circ\text{C}$                            |
| Operating Temperature | Case Temperature $T_c = -40^\circ\text{C} \sim +90^\circ\text{C}$ ; 10%RH~100%RH   |
| Storage Temperature   | $-40^\circ\text{C} \sim +85^\circ\text{C}$ ; 5%RH~100%RH   |
| MTBF                  | $\geq 280,000$ hours, $75^\circ\text{C}$ case temperature (MIL-HDBK-217F)  |
| Lifetime              | $\geq 100,000$ hours, $75^\circ\text{C}$ case temperature, refer to life vs. $T_c$ curve   |
| Case Temperature      | $90^\circ\text{C}$ max, marked in the $T_c$ point of label   |
| Dimensions            | 8.85x2.66x1.52 by inch (body), 9.88x2.66x1.52 by inch (endcaps included)<br>225.0x68.0x38.5 by mm (body), 251.0x68.0x38.5 by mm (endcaps included) |
| Net Weight            | 1600g  |
| Packing               | 20pcs/Carton/22kg, 490 x 370 x 190 by mm   |

Notes: Unless specified, all the test results are measured in  $25^\circ\text{C}$  room temperature.

**■ Dimming**

| Parameter                  | Min.          | Typ.       | Max.                |
|----------------------------|---------------|------------|---------------------|
| Vdim Sourcing Current      | 200uA         | 300uA      | 450uA               |
| Vdim Allowed Input Voltage | -20 V         |            | 20 V                |
| 0-10V Dimming Range        | 2% (Vdim=1V)  | Linear     | 100% (Vdim=9~10V)   |
| PWM Dimming Range          | 2% (Duty=10%) | Linear     | 100% (Duty=90-100%) |
| Dim off threshold          | 0.4V or 4%    | 0.5V or 5% | 0.6V or 6%          |
| Dim on threshold           | 0.6V or 6%    | 0.7V or 7% | 0.8V or 8%          |

















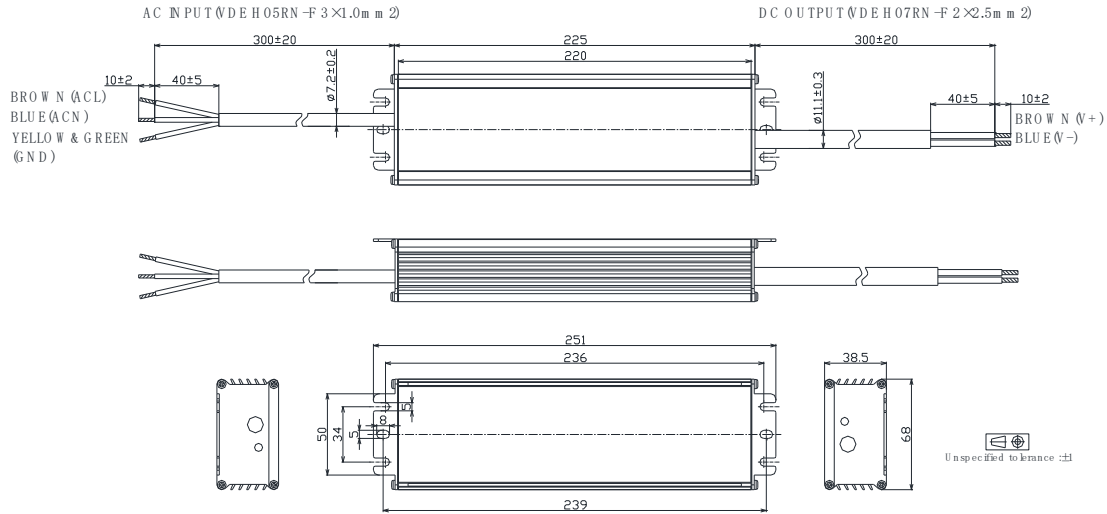






320W, 100-277Vac Input, NFC Programmable Constant Voltage LED Driver

- BLD-320-V024-NNS (VDE Cable)



- BLD-320-V024-ENS (VDE Cable)

