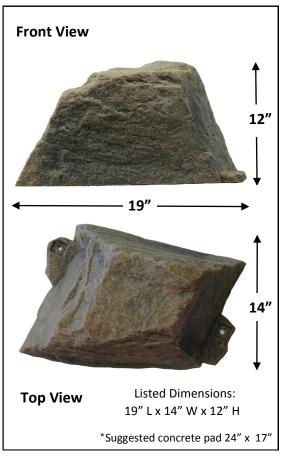


# Faux Rock Power Supply for StarGazer Downlight



| Sample Interior Spacing |          |       |  |  |
|-------------------------|----------|-------|--|--|
| Height                  | Length   | Width |  |  |
| 2"                      | 11"      | 10"   |  |  |
| 6"                      | 12"      | 4"    |  |  |
| 10"                     | 8"       | 3"    |  |  |
| Diameter Sizing         |          |       |  |  |
| Height                  | Diameter |       |  |  |
| 2"                      | 11"      | Dia   |  |  |
| 6"                      | 9"       | Dia   |  |  |
| 9"                      | 7"       | Dia   |  |  |
|                         |          |       |  |  |



#### **ENCLOSURE FEATURES AND BENEFITS:**

- Realrock™ material provides the realistic rock features
- -Commercial grade construction stands up to elements
- -Lightweight, easy to move, and incredibly durable
- Rocks will not fade in sun or crack in cold weather
- Rocks designed to conceal existing utility devices



#### 40W CONSTANT VOLTAGE + CONSTANT CURRENT LED DRIVER

This Power Supply is a 40W AC/DC LED driver featuring the dual modes constant voltage and constant current output. This Power Supply operates from  $90\sim305$  VAC. Thanks to high efficiency up to 90%, with the fan-less design, this driver is able to operate for  $-40^{\circ}$ C  $\sim +80^{\circ}$ C case temperature under free air convection.

#### **FEATURES**

- Constant Voltage + Constant Current mode output
- Plastic housing with Class II design
- Built-in active PFC function
- Class 2 power unit
- Fully encapsulated with IP67 level
- Typical lifetime > 50000 hours
- One power supply can power up to three medium size (M) StarGazer lights or one large size (L) StarGazer light. Additionally, the power supply can be remotely located up to 150 feet from the light source(s).





## **ROCK COLOR OPTIONS**



**Autumn Bluff** 



Fieldstone Gray



Riverbed Brown



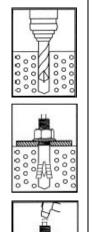
Sandstone Tan

#### **INSTALLATION INSTRUCTIONS:**

- 1. If heat is required, installations will require GFI protected power mounted at least 6" above all water discharge ports or per local code regulations.
- If concrete base is required. Pour concrete pad per measurements provided. If mounting to ground, level area where enclosure is to be installed.
- If installation requires self regulated heat tape, install per instructions securing to piping and valve. Place insulated pouch over valve and piping assembly.
- Place rock over device. Verify that rock does not interfere
  with device. Insert included stakes for soil installation. For
  concrete installations see optional concrete installation instructions.

#### **CONCRETE ANCHOR INSTALLATIONS**

- Drill hole with same diameter as anchor of sufficient depth. Clean drilled hole of dust and debris.
- 2. Place washer and nut onto threaded anchor as required.
- With nut, washer and set pin in place insert anchor through rock flange column and into concrete base.
- Using a proper size hammer set pin with several sharp and square strikes on head of pin until pin is flush with top of threaded anchor.



#### **SPECIFICATIONS**

| OUTPUT                | SETUP, RISE TIME Note.6  | 1000ms, 80ms / 115VAC 500ms, 80ms / 230VAC   |
|-----------------------|--|--|
| 24VDC                 | HOLD UP TIME (Typ.)  | 16ms/230VAC 16ms/115VAC  |
|                       | VOLTAGE RANGE Note.5   | 90 ~ 305VAC 127 ~ 431VDC (Please refer to "STATIC CHARACTERISTIC" section)   |
|                       | FREQUENCY RANGE  | 47 ~ 63Hz  |
|                       | POWER FACTOR   | PF ≥ 0.97/115VAC, PF ≥ 0.95/230VAC, PF ≥ 0.92/277VAC@full load (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)  |
| INPUT                 | TOTAL HARMONIC DISTORTION  | THD< 20% (@load ≥60%/115VC,230VAC; @load ≥ 75%/277VAC)<br>(Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)   |
|                       | EFFICIENCY (Typ.)  | 87%  |
|                       | AC CURRENT   | 0.6A / 115VAC  |
|                       | INRUSH CURRENT(Typ.)   | COLD START 50A(twidth=210µs measured at 50% Ipeak) at 230VAC; Per NEMA 410   |
|                       | MAX. No. of PSUs on 16A<br>CIRCUIT BREAKER   | 12 units (circuit breaker of type B) / 20 units (circuit breaker of type C) at 230VAC  |
|                       | LEAKAGE CURRENT  | <0.75mA/240VAC   |
|                       | OVER CURRENT   | 95 ~ 108%  |
|                       | OVER CURRENT   | Constant current limiting, recovers automatically after fault condition is removed   |
|                       | SHORT CIRCUIT  | Hiccup mode, recovers automatically after fault condition is removed   |
| PROTECTION            |  | 28 - 35V   |
|                       | OVER VOLTAGE   | Shut down and latch off o/p voltage, re-power on to recover  |
|                       | OVER VOLTAGE  OVER TEMPERATURE   | Shut down and latch off o/p voltage, re-power on to recover  Shut down o/p voltage, re-power on to recover   |
|                       |  | 1 3 1  |
|                       | OVER TEMPERATURE   | Shut down o/p voltage, re-power on to recover  |
|                       | OVER TEMPERATURE WORKING TEMP.   | Shut down o/p voltage, re-power on to recover  Tcase=-40 ~ +80°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)  |
| ENVIRONMENT           | OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY  | Shut down o/p voltage, re-power on to recover  Tcase=-40 ~ +80°C (Please refer to * OUTPUT LOAD vs TEMPERATURE* section)  Tcase=+80°C  |
| ENVIRONMENT           | OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY  | Shut down o/p voltage, re-power on to recover  Tcase=-40 ~ +80°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)  Tcase=+80°C  20 ~ 95% RH non-condensing   |
| ENVIRONMENT           | OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY  | Shut down o/p voltage, re-power on to recover  Tcase=-40 ~ +80°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)  Tcase=+80°C  20 ~ 95% RH non-condensing  -40 ~ +80°C, 10 ~ 95% RH  ±0.03%/°C (0 ~ 50°C)  10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes  |
| ENVIRONMENT           | OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT  | Shut down o/p voltage, re-power on to recover  Tcase=-40 ~ +80°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)  Tcase=+80°C  20 ~ 95% RH non-condensing  -40 ~ +80°C, 10 ~ 95% RH  ±0.03%/°C (0 ~ 50°C)   |
| ENVIRONMENT  SAFETY & | OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION  | Shut down o/p voltage, re-power on to recover  Tcase=-40 ~ +80°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)  Tcase=+80°C  20 ~ 95% RH non-condensing  -40 ~ +80°C, 10 ~ 95% RH  ±0.03%/°C (0 ~ 50°C)  10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes  UL8750, CSA C22.2 No. 250.0-08(except for 48V, 54V), ENEC EN61347-1, EN61347-2-13 independent, EN62384, IP67,   |
|                       | OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS Note.8  | Shut down o/p voltage, re-power on to recover  Tcase=-40 ~ +80°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)  Tcase=+80°C  20 ~ 95% RH non-condensing  -40 ~ +80°C, 10 ~ 95% RH  ±0.03%/°C (0 ~ 50°C)  10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes  UL8750, CSA C22.2 No. 250.0-08(except for 48V, 54V), ENEC EN61347-1, EN61347-2-13 independent, EN62384, IP67, J61347-1, J61347-2-13 approved : design refer to UL60950-1, TUV EN60950-1   |
| SAFETY &              | OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS Note.8 WITHSTAND VOLTAGE  | Shut down o/p voltage, re-power on to recover  Tcase=-40 ~ +80°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)  Tcase=+80°C  20 ~ 95% RH non-condensing  -40 ~ +80°C, 10 ~ 95% RH  ±0.03%/°C (0 ~ 50°C)  10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes  UL8750, CSA C22.2 No. 250.0-08(except for 48V, 54V), ENEC EN61347-1, EN61347-2-13 independent, EN62384, IP67, J61347-1, J61347-2-13 approved : design refer to UL60950-1, TUV EN60950-1  I/P-O/P:3.75KVAC   |
| SAFETY &              | OVER TEMPERATURE  WORKING TEMP.  MAX. CASE TEMP.  WORKING HUMIDITY  STORAGE TEMP., HUMIDITY  TEMP. COEFFICIENT  VIBRATION  SAFETY STANDARDS Note.8  WITHSTAND VOLTAGE  ISOLATION RESISTANCE  | Shut down o/p voltage, re-power on to recover  Tcase=-40 ~ +80°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)  Tcase=+80°C  20 ~ 95% RH non-condensing  -40 ~ +80°C, 10 ~ 95% RH  ±0.03%/°C (0 ~ 50°C)  10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes  UL8750, CSA C22.2 No. 250.0-08(except for 48V, 54V), ENEC EN61347-1, EN61347-2-13 independent, EN62384, IP67, J61347-1, J61347-2-13 approved; design refer to UL60950-1, TUV EN60950-1  I/P-O/P:3.75KVAC  I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH  Compliance to EN55015, EN61000-3-2 Class C (@load ≧ 60%); EN61000-3-3  Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, light industry level (surge immunity Line-Line 2KV)   |
| SAFETY &              | OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS Note.8 WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION Note.8 EMC IMMUNITY                | Shut down o/p voltage, re-power on to recover  Tcase=-40 ~ +80°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)  Tcase=+80°C  20 ~ 95% RH non-condensing  -40 ~ +80°C, 10 ~ 95% RH  ±0.03%/°C (0 ~ 50°C)  10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes  UL8750, CSA C22.2 No. 250.0-08(except for 48V, 54V), ENEC EN61347-1, EN61347-2-13 independent, EN62384, IP67, J61347-1, J61347-2-13 approved; design refer to UL60950-1, TUV EN60950-1  I/P-O/P:3.75KVAC  I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH  Compliance to EN55015, EN61000-3-2 Class C (@load ≥ 60%); EN61000-3-3  Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, light industry level (surge immunity Line-Line 2KV)  438.8Khrs min. MIL-HDBK-217F (25°C)                        |
| SAFETY &              | OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS Note.8 WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION Note.8 EMC IMMUNITY MTBF DIMENSION | Shut down o/p voltage, re-power on to recover  Tcase=-40 ~ +80°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)  Tcase=+80°C  20 ~ 95% RH non-condensing  -40 ~ +80°C, 10 ~ 95% RH  ±0.03%/°C (0 ~ 50°C)  10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes  UL8750, CSA C22.2 No. 250.0-08(except for 48V, 54V), ENEC EN61347-1, EN61347-2-13 independent, EN62384, IP67, J61347-1, J61347-2-13 approved; design refer to UL60950-1, TUV EN60950-1  I/P-O/P:3.75KVAC  I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH  Compliance to EN55015, EN61000-3-2 Class C (@load ≥ 60%); EN61000-3-3  Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, light industry level (surge immunity Line-Line 2KV)  438.8Khrs min. MIL-HDBK-217F (25°C)  162.5°43°32mm (L*W*H) |
| SAFETY & EMC          | OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS Note.8 WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION Note.8 EMC IMMUNITY                | Shut down o/p voltage, re-power on to recover  Tcase=-40 ~ +80°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)  Tcase=+80°C  20 ~ 95% RH non-condensing  -40 ~ +80°C, 10 ~ 95% RH  ±0.03%/°C (0 ~ 50°C)  10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes  UL8750, CSA C22.2 No. 250.0-08(except for 48V, 54V), ENEC EN61347-1, EN61347-2-13 independent, EN62384, IP67, J61347-1, J61347-2-13 approved; design refer to UL60950-1, TUV EN60950-1  I/P-O/P:3.75KVAC  I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH  Compliance to EN55015, EN61000-3-2 Class C (@load ≥ 60%); EN61000-3-3  Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, light industry level (surge immunity Line-Line 2KV)  438.8Khrs min. MIL-HDBK-217F (25°C)                        |

#### NOTE

- 1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature.
- 2. Please refer to "DRIVING METHODS OF LED MODULE".
- 3. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 4. Tolerance: includes set up tolerance, line regulation and load regulation.
- 5. De-rating may be needed under low input voltages.
- 6. Length of set up time is measured at first cold start. Turning ON/OFF the driver may lead to increase of the set up time.
- 7. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED driver can only be used behind a switch without permanently connected to the mains.
- 8. This series meets the typical life expectancy of >50,000 hours of operation when Tcase, particularly tc point (or TMP, per DLC), is about 75°C or less.
- 9. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com

### Wiring Instructions

WARNING: Always install fixture(s) according to National Electrical Code (NEC) and local codes. Failure to do so will void the warranty and could cause damage to the fixture(s) or may result in personal injury.

NOTE: THIS FIXTURE CONTAINS ELECTRONIC COMPONENTS THAT CAN BE SENSITIVE TO VOLTAGE SURGES AND LIGHTNING. EAGLE MOUNTAIN FLAG & FLAGPOLE RECOMMENDS THAT ALL SYSTEMS BE PROPERLY GROUNDED AGAINST TRANSIENT ELECTRICAL SURGES. EAGLE MOUNTAIN FLAG & FLAGPOLE PROVIDES GROUNDING SYSTEMS FROM THE LIGHT SOURCE TO THE DRIVER. ALL GROUNDING LUGS MUST BE PROPERLY ATTACHED.

NOTE: FIXTURE MUST BE INSTALLED BY A LICENSED ELECTRICIAN. THESE INSTRUCTIONS DO NOT COVER ALL DETAILS OR VARIATIONS IN EQUIPMENT, NOR DO THEY PROVIDE FOR EVERY UNCERTAINTY RELATED TO INSTALLATION, OPERATIONS, MAINTENANCE OR MOUNTING CONTINGENCY. SHOULD SPECIFIC PROBLEMS OCCUR THAT ARE NOT COVERED SUFFICIENTLY FOR THE PURCHASER'S PURPOSE, CONTACT EAGLE MOUNTAIN FOR ADDITIONAL PRODUCT OR APPLICATION INFORMATION.

CAUTION: DO NOT RUN LINE VOLTAGE (110V/208V/277V) INSIDE THE FLAGPOLE. THE LOW VOLTAGE CABLE ATTACHED TO THE STARGAZER DOWNLIGHT IS SAFE INSIDE THEFLAGPOLE. LINE VOLTAGE (110V/208V/277V) IS AN ELECTRICAL HAZARD IF IT IS INSIDE THE FLAGPOLE. ALL ELECTRICAL CONNECTIONS MUST BE MADE INSIDE THE POWERSUPPLY\*. DO NOT WIRE STARGAZER DOWNLIGHT DIRECTLY TO LINE VOLTAGE. THE LINE VOLTAGE (110V/208V/277V) AND THE LOW VOLTAGE WIRE PROVIDED MUST BE CONNECTED INSIDE THE POWER SUPPLY LOCATED INSIDE THE EAGLE MOUNTAIN FLAG ENCLOSURE BOX PROVIDED. NO NOT MOUNT ENCLOSURE BOX TO FLAGPOLE.

# IMPROPER INSTALLATION AND/OR UTILIZATION WILL VOID MANUFACTURER'SWARRANTY.

- 1) The power supply comes in an Eagle Mountain Flag enclosure box. The enclosure box must be mounted OUTSIDE of the flagpole and can be located up to 150' away from the StarGazer Downlight. DO NOT PLACE ENCLOSURE BOX INSIDE OF YOUR FLAGPOLE. DO NOT BURY THE ENCLOSURE BOX. (Excluding the In-Ground/Burial Power Supply; SG-IG-DRIVER)
- 2) Identify and attach secondary side wires from LED Driver to low voltage cable using wire nuts (not provided). Make sure to observe polarity (RED to RED (+), BLACK to BLACK
- (-). It is strongly recommended to use a color coded 18-gauge 2 strand cable that is provided by Eagle Mountain Flag & Flagpole when wiring the StarGazer Downlight inside the power supply.
- 3) Mount the enclosure box remotely outside of the flagpole taking special care not to pinch wires.
- 4) Supply power to the power supply and check to see that it is operating properly.