

DuraQ Driver

Features and Benefits / FAQs

Reliable. Robust. Proven.

The DuraQ high performance driver is the first of its kind in the lighting industry! Providing a robust design with superior operating life versus today's LED electronic drivers the DuraQ driver is the go-to solution for long-life lighting needs. The DuraQ driver has been integrated into the Celesteon high mast luminaire to provide reliability for your mission critical lighting needs.

FEATURES

- A specialty transformer that regulates the secondary voltage against line and load variation
- Tested and rated to 30kV non-destructive high surge suppression ability
- Low input Harmonics (< 20% THD) and High Input Power Factor (0.97 typical)
- Built in power conditioner
- Long operating life (20 years typical)
- Ability to ride-through input power interruption
- Does not emit conducted or radiated EMI

BENEFITS

- Protects against Surge and Sag conditions, extending driver and electrical component life
- Eliminates maintenance and warranty costs due to surge failures. Additional surge protector not required
- Improves electrical grid reliability.
- Ideal for use in "dirty power" sites and with non-linear loads
- Lower maintenance and warranty expenses
- Eliminates chances of light flickering and on/off interruptions
- Approved for FCC and reduces noise that may affect other electrical components or AC Main

FERRORESONANT DRIVER

- Does not contribute to EMI noise
- Long operating life (> 20 years)
- High reliability
- Robust and scalable system (from 100W -100kW)
- Lower DC ripple
- Reduced SKUs with multiple voltage configurations using winding taps
- No power interruptions or LED flicker

vs.

SWITCHING DRIVER

- Generates EMI, requires EMI filter
- Short operating life (5-10 years with additional cost)
- Limited reliability, susceptible to surges and power transients
- Limited to UNV input range. 347-480V requires additional SKUs
- May shut-down and restart if input voltage and temperature change



QUICK FACTS

- 30kV surge protection standard
- Multi tapped from 120V - 480V
- 60Hz input frequency
- "Try before you buy" pilot program available



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Frequently Asked Questions

- **What is the DuraQ option?**

▶ The DuraQ option uses resonance technology to provide a regulated output to LEDs. It is optimal for use in high power outdoor fixtures and will protect LED electronics from power surges, voltage transients, and dirty power conditions.

- **What is the surge protection rating of the DuraQ driver?**

▶ The DuraQ driver has been tested to provide up to 30kV surge protection.

- **What input voltage does DuraQ support?**

▶ Multitap options at 120V / 208V / 240V / 277V / 347V / 480V.

- **What voltage can DuraQ withstand (max input voltage)?**

▶ Max input voltage of 480V.

- **Does DuraQ support dimming?**

▶ No dimming supported, will be available in the future.

- **Will DuraQ protect my photocontrols?**

▶ Photocontrols are located in front of the DuraQ driver so it will not be protected from surges. The DuraQ option will protect photocontrols from EMI interference.

- **What is a voltage transient?**

▶ Voltage Transients are defined as short duration surges of energy. They are caused by the sudden release of stored energy due to incidents such as lightning strikes, unfiltered electrical equipment, contact bounce, arcing, and capacitor banks or generators being switched ON and OFF. Voltage transients are harmful to electrical equipment if not fully protected.

- **What is the result of a dropped neutral and what causes it?**

▶ In the event of a dropped neutral, the single-phase voltage will rise to the three-phase level subjecting your equipment to 240 instead of 120V or >400V instead of 240V. This results in over voltage and can be catastrophic to electrical equipment.

- **What is the difference between voltage swell and voltage sag?**

▶ Voltage swells are brief increases in voltage and voltage sags are brief decreases in voltage typically lasting from a milliseconds to a second. Overtime, both conditions will damage switching drivers due to over-switching/over-heating of internal components to maintain a regulated output to LED loads. The DuraQ driver can withstand these conditions.

- **Do I still need additional fuses and/or surge protection with DuraQ?**

▶ Fuses and surge protection are integrated into the DuraQ driver. Additional fuses and surge protectors are not required.