

Introducing NexGen Helios™ 20W LED Driver powered by NexGen Vertical GaN™ technology





Highest Power Density & More Lumens



Advanced Power Control



High Performance & Quality of Light



With Lighting Designs getting sleeker – more compact solutions are needed without sacrificing Lumens or Quality of Light. The NexGen Helios 20W LED Driver (NL020SD) is an isolated, compact, high-performance solution for next-generation Lighting Designs. The Helios™ NL020SD delivers flicker-free 1% dimming with 0-10V interface at 85% efficiency with high PF and low THD. NexGen Helios™ LED Drivers are based on revolutionary NexGen Vertical GaN® technology, the world 1st GaN-on-GaN power transistor enabling smaller form factors through higher switching frequencies.

## Features

- Universal Input Voltage: 120 277V
- · Class 2 Power Supply
- · 1-Channel Programmable Constant Current Output
- · High Power Factor and Efficiency
- 1% Flicker-free dimming with Dim-to-off
- Programmable output current & minimum dimming level
- · Flicker-free dimming with Dim-to-off
- 50,000 Hours Lifetime
- IP20-rated case
- Surge Protection
  - 2kV line-to-line
  - · 2.5kV ring wave
- SCP, OCP, OTP, Input UVP, Input OVP, Over-load & Reverse Polarity Protection
- · Meets regulatory standards and certifications

Parameters	NL020SD Specification
Maximum Output Power	20 W
Output Type	1-channel, Constant Current
Input Supply Voltage	108 V – 305 V
Supply Frequency	50/60 Hz
Efficiency	85.00%
Power Factor	>0.9
THD	<20%
Output Voltage	28 V – 42 V
Output Current	100 mA – 710 mA
Output Current Tolerance	±5%
Dimming Method	0-10 V
Dimming Range	1% - 100%









Leveraging NexGen Vertical GaN's lower conduction and switching losses, the Helios 20W LED driver delivers superior efficiency, power factor and total harmonic distortion in a compact form factor. Whether it is downlighting, track lighting, ceiling lighting or panel lighting for residential, commercial or architectural applications, the Helios 20W LED driver is the one driver that is suitable for multiple luminaire designs.

NexGen Vertical GaN: Powering the Helios LED 20W with a new benchmark in power electronics:

- Smallest die-size and inherently robust with best-in-class performance
- · Manufactured in NexGen's state-of-the-art Fab in Syracuse, NY

## www.nexgenpowersystems.com

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Founded in 2017, NexGen Power Systems is revolutionizing power electronics with technology solutions utilizing GaN-on-GaN (NexGen Vertical GaN®) discrete semiconductor devices that increase efficiency and reliability of power conversion systems while dramatically reducing their cost, size, and weight. Our vision is to enable the smallest, lightest, most cost-effective power conversion systems in the world.

