

THE MINIATURISED, HIGH-END
LED DRIVERS
FOR YOUR DESIGN



“I know
what I
LIKE
when I
SEE IT”

SATISFYING THE DEMANDING CUSTOMER'S DESIRES

Today's shopper is an unmerciful, fleeting creature, pouncing on even the tiniest of flaws. Add to that an attention span of a five-year-old: Yes, a calm, well-designed environment is severely needed for Homo Sapiens Shoppingensis to stay and focus.

Visually pleasing

Imagine a high-end retail shop. The goods sold here are presented in spotless, well-crafted displays arranged with great care in order to best offer their contents. Design is key, and everything exudes luxury. But all too often, the lighting design has had to make visible trade-offs in the form of bulky power supplies attached to the otherwise stylish designer lamps. Or it has been necessary to lower the ceiling in order to hide the clutter of the LED drivers, making the room feel cramped and devoid of air and spaciousness.

A designer luminaire should not be compromised by its power supply. NPC makes LED drivers so tiny that they can be hidden within the design, making it possible to have an unhindered and visually pleasing lighting design.

Calm environment

When a customer enters the shop, first impressions are crucial. Sight, sound, and even smell – opinions and categorisations are formed within seconds. Most important is the visual side, where the sphere of influence reaches far outside the shop. Lighting is instrumental in the window displays, and once inside, it should convey an atmosphere that both reflects the shop's brand and a pleasant, welcoming, environment. Only now the customer begins to evaluate the products. But flicker is an issue with most modern LED lighting, and can cause all sorts of discomfort, repelling otherwise interested customers.

Luminaires using NPC's drivers emit a truly calm, flicker-free, highly controllable light that will make it effortless to stay in the shop for a long time.

Focus on the product

A purchase is only made when the customer feels like making it. And in order to reach to that point, people need to focus on the product. The trouble is, flicker is an unseen but very real distraction that draws sensory capacity from the customer while inserting discomfort into the product associations, and may even trigger a need to leave. We need to feel relaxed and comfortable in order to stay long enough to buy anything.

Decor, ambience and lighting need to induce that feeling as well as be on a par with the brand of the shop. Luminaires should provide the exact right amount of light, and the quality of that light should be pleasing. NPC is proud to present their unique next-gen LED drivers, which accomplish this better than any driver has ever done before.



“My company
TRUSTS
me
with the
DIRECTION
of our
products”

PROVIDE QUALITY AND CREATE VALUE FOR YOUR CUSTOMERS

Targeting the high-end demographic, NPC's drivers offer compelling end-user Key Selling Points, that will give your products a significant market advantage. Once the quality-focused customer learns about these features, they will want them.

A disruptive market shift

Most people reading this know how incredibly fast the LED market has grown during the last decade, and it's safe to say that it has been a disruptive market shift. But who will ultimately conquer this new market? The 'disruptive' part gives us a guide: Every disruptive change has had a mechanism of a growing technology that started out as inferior, but quietly surpassed the old version on specifications and ease of use, but was often disregarded by the established, soon-to-be-replaced market.

Aside from spectral quality, the single major obstacle for LED lighting has up until now been the trade-off between flicker and the size of the power converter. NPC's drivers solves that, placing you on the good side of the disruptive wave.

End-user Key Selling Points

The high-end customer does their research, and aside from improved design possibilities, NPC's drivers offer some convincing features that once brought to attention, the customer will use as major decision-making parameters.

First of all, they're *flicker-free*. It's instantly relatable, because everybody hates fluorescent lights. Bring it home by emphasising the very real disadvantages of flicker (headaches, fatigue and in rare instances vision impairment).

Secondly, they have *smooth dimming*. The consumer of today wants things to be responsive and unjagged, and NPC's drivers dim smoothly to zero.

Thirdly, they are *compatible* with DALI and Bluetooth. It's effortless plug-and-play for the end-user.

The new norm

All luminaire manufacturers are facing new customer demands. The retail chains wants easy install and savings on electricity and carbon footprint. Moreover, the individual end-users calls for uncompromised design and improved quality of light. NPC's drivers can provide all that, making them the sound decision. And this decision will have to be taken soon, as we are facing a shift in the entire luminaire market.

What we will see in the near future is that flickering and/or electrically inefficient luminaires will be pushed towards the low-end market, and out of the high-end segments. The question is whether that is acceptable for your position in the market. If not, NPC's drivers are the answer.



“My DESIGN
choices
reflect our
brand”

SHOW YOUR DESIGN

NOT THE POWER SUPPLY

Your design should showcase your style, not limitations of technology. With the LED drivers from NPC, that awkward phase of visible drivers is finally over. And not only are they small, they also eliminate flicker and provide smooth and deep dimming.

Miniaturisation

There is a saying in the industry: Luminaires should either go unnoticed or be the centrepiece of the room. Either way, nobody ever wants to see the driver block. But up until now, power conversion has required large and bulky components, and designers have been forced to work around that.

Fortunately, this is no longer necessary because of a miniaturised alternative: NPC's LED Driver series use patented next-gen technology that makes it possible to get the same power from a much smaller package while actually improving light quality.

With NPC's LED Drivers, the power supply module is so small it can be hidden inside the design, again making it a joy to design luminaires.

Simple, easy and *as usual*

“Great – that sounds... difficult?” *Absolutely not.* NPC's drivers are connected precisely the same way as you have always done, with no extra weirdness added. They do one thing, and do it well: Convert the AC mains to smooth DC current for the LEDs.

New technology used to be associated with a lot of hassle, but NPC knows that hassle is no longer acceptable. NPC is an engineering company that deals with the hardcore technological side of LED drivers so designers can again focus on design. The tough decisions and optimisations have been made, and seen from the designer's point of view, NPC's drivers are electrically compatible to their bigger, clumsier counterparts. Only way smaller, and with better specs.

Light quality

A bad light source in a beautiful luminaire is absolutely infuriating. This is however an everyday trade-off designers have had to make up until now, polluting their work in order to minimize bulky impacts on the design. But now the solution is here: NPC's drivers are the ingredient that adds the missing qualities.

NPC's driver technology outputs ripple-free current, providing flicker-free light. This significantly improves the quality of illumination and the well-being of the people working and living under the light coming from your luminaires.

Add to that a dimming curve without stair stepping, complimentary of the technology. NPC's drivers will make any LEDs perform at their absolute best.



“They
see
quality
or
THEY
WALK”

DESIGN AND LIGHT IS GOOD BUSINESS FOR RETAIL AND HOTELS

It's all about attracting customers. Design is absolutely key in this process, and no business knows this better than Retail. But up until now, there has been a conflict between design and light quality – and the latter is instrumental in making customers stay.

Shop environment

Retail customers and shop personnel have for too long had to live with inferior light quality, and flicker is the primary offender. Aside from being a nuisance, it can cause fatigue, headache, and a whole range of other unpleasant effects. It was bad with fluorescent lamps, and it's worse with LED. But things are changing for the better.

Shops and hotels are the battlegrounds where the first LED quality of light revolution will be fought. And it is not just a matter of atmosphere and aesthetics – it's about fierce competition and market shares.

NPC and their flicker-free next-gen drivers are at the absolute forefront of LED light quality, making luminaires using these the preferred choice.

Profitable

Imagine the financial gain if customers stayed just a little bit longer in the shop. A lot of effort has been poured into this one goal, sparking exotic but efficient tools like ambience design, clerk type-casting and olfactory branding. But up until now, two of the most important areas – light quality and design – have been mutually exclusive. This is a shame, because while design is key, shops, chains and hotels need good lighting in order to attract and retain customers.

Also factor in the positive impact on the employees. Removing flicker is like a load off your shoulders, and happy, unstressed shop personnel simply sell more. And the improved working environment will result in less sick leave. Choosing flicker-free luminaires is simply good business.

Environmentally friendly

Today's high-end consumer has a big environmental conscience. So do retail chains, as most have a Corporate Responsibility goal in reducing their carbon footprint. NPC's drivers are environmentally friendly, giving the end-customer a substantial positive environmental as well as financial impact.

While all drivers are fairly efficient at full power, most other drivers suffer power losses when dimmed. Due to its patented technology, NPC's drivers have a considerably greater efficiency at all dimming levels, conserving power.

This adds up quickly and converts to actual financial savings, which is of course always welcome. But more importantly, NPC's drivers will help save tonnes of CO₂.



YOUR CHOICE HAS IMPACT ON THE WORLD

The NPC family of next-gen drivers will improve your designs, provide better quality of light, and have real environmental benefits for a lot of people. The first family member is here, with more to come. Join in our vision and be a market driver.

Unhindered design

Finally! Gone are the days where your design had to incorporate a big, unsightly box. NPC's driver family is completely integrated in the 230 V track, allowing for a previously unheard of level of freedom. And not only in form, but also in Quality of Light and the interior design applications that depend on a small form factor and precisely controlled light.

An example of this could be a row of downlights lighting up a wall – something that used to have a very high possibility of ending up with very uneven lighting. Or the ability to dim smoothly and precisely to create an intimate atmosphere. With NPC's miniaturised drivers and their precise, smooth dimming, the only limit to lighting design is the imagination.

Tests confirm next-level benefits

Flicker comes in two varieties: First and worst is visible flicker, where the rate is so slow that we see blinking. The other is the 'Phantom Array Effect', which will make movement look like a collection of still images side by side. Most existing drivers will cross through the 'Phantom Array Effect' zone and straight in to visible flicker when dimmed. Interesting physics, but really not human-friendly.

Independent tests performed by a well-known and respected third party have shown that NPC's drivers are not only magnitudes better, they are also so well below the IEEE 1789 NOEL (No Observable Effect Level) limits that they can objectively be considered ideal. They simply outperform everything else on the market.

Make the future brighter

NPC's driver family is a brand with a vision: To be a make LED lighting healthy and make good design possible. And we are constantly pushing the boundaries, with each new product better than anything else on the market. We believe our efforts make a difference in the world – not just on our customers' bottom line, but also by making environmentally better products while providing aesthetic joy and improved working conditions for the thousands of people who get to enjoy the pleasure of unhindered design and healthy lighting.

We invite you to take part in this. By making a switch to the next generation of drivers, you can improve your designs, ensure your position in the market *and* improve life for a lot of people.

The products in the NPC driver family are all part of our vision: Improving work conditions while enabling unhindered design, all while reducing emissions.

Nordic Power Converters

———— Powering a brighter future™

Nordic Power Converters

Smedeholm 13A

DK-2730 Herlev

Denmark

Phone: (+45) 60 630 670

Email: info@nopoc.com