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# Silanna UV Revolutionizes Far UV-C and Deep UV-C LEDs with New Tech

## *Sets new record for output power at 235 nm, offers exceptional lifetime performance*

**Brisbane, Australia, 12th October, 2022 *-*** Silanna UV has announced new far UV-C and deep UV-C LEDs that take advantage of the company’s patented short period superlattice (SPSL) technology for industry-leading performance in the difficult-to-obtain 230 – 265 nm UV range – including the highest output power in any mass-produced UV LED at 235 nm.

The far UV-C 235 nm SF1 series and deep UV-C 255 nm SN3 series are both available in either 120-degree or 30-degree viewing angle SMD packages, making them ideal for a wide range of tasks. The 30-degree package’s parabolic lens provides greater irradiance than even traditional UV lamps. Both the SF1 and SN3 series boast low power consumption and have exceptional operating lifetimes.

These new LEDs offer the perfect solution for various deep UV and far UV use cases such as sterilization, water and gas sensing, and instrumentation applications. The SF1 and SN3 series are powerful, small footprint deep UV-C emitting devices that deliver long lifetimes and high conversion efficiency.

### [SF1: UV-C LEDs for nitrate sensing, gas detection, liquid chromatography](https://silannauv.com/sf1/)

[The 235 nm peak wavelength SF1 series](https://silannauv.com/sf1/) comprises the 120-degree view angle (SF1-3C3FWL1), and the 30-degree (SF1-3U8P3L1). These far UV LEDs are effective for water quality detection of nitrate (NO3) and nitrite (NO2), gas detection and high performance liquid chromatography (HPLC). Sensing applications will be enhanced by the higher irradiance of the SF1-3U8P3L1’s 30-degree collimated source design.

### SN3: UV-C LEDs for COD, suspended solids, ozone detection, medical analyzers

Silanna’s [255 nm deep UV-C SN3 series](https://silannauv.com/sn3/) is ideal for water quality applications, including UV254 organic compound sensors, chemical oxygen demand monitoring, and measurement of suspended solids. Other application of the SN3 series are ozone gas (O3) detectors and medical analyzers. Both 120-degree (SN3-5C3FWL1) and 30-degree (SN3-5U8P3L1) package versions are available. The 30-degree collimated source design of the SN3-5U8P3L1 package offers higher irradiance for enhanced resolution in sensing applications.

### Revolutionary SPSL technology

Silanna UV’s groundbreaking patented SPSL approach overcomes many of the difficulties that plague competing AlGaN UV-C LED technologies. By engineering a nanostructure from alternating layers of AlN and GaN, Silanna UV have developed a new material that is easier to control, and which has far superior properties to traditional AlGaN. Silanna’s SPSL mitigates several issues that AlGaN has for short wavelength LEDs - in particular, the older method’s poor light extraction and electrical performance. This means revolutionary benefits for UV-C LED quality.

For more information on Silanna UV’s technology and UV-C LED products, please contact the Sales Team at sales\_uv@silanna.com.

### About Silanna UV

The Silanna Group is an Australian semiconductor manufacturer established in 2006. Privately funded since being acquired from Peregrine Semiconductor in 2008, Silanna UV is an ISO 9001:2015 certified solution provider for UV-C LED manufacturing. Based in Brisbane, Australia, they provide far UV-C light sources for water quality sensors, gas sensors, disinfection, and HPLC applications. Silanna UV’s innovative approach allows UV LED technology to push toward shorter wavelengths, from 230 nm to 265 nm, including deep UV-C and far UV-C ranges. The company boasts unique epitaxy capabilities and holds patents related to UV LED technology. With its unique approach, Silanna UV strives to create new possibilities by pushing UV wavelength boundaries to the limit. To learn more, please visit <http://www.silannauv.com/>.