

General Technical & Safety Statement for UV LED Components

1. Product Nature

All Queendom UV LEDs are electronic components (e.g., SMD 5050, 3535 packages), designed exclusively for integration into professional systems by qualified engineers. They are not finished devices and do not constitute medical, disinfection, or consumer products.

2. Wavelength Classification & Applications

Band	Wavelength Range	Typical Use Cases	Key Limitation
UVC	254 nm – 280 nm	Air/water/surface disinfection modules	Must be used in fully enclosed, interlocked systems only
UVB	280 nm – 320 nm	Medical phototherapy, sensing	Requires clinical device certification for therapeutic use
UVA	320 nm – 405 nm	UV curing, fluorescence, counterfeit detection	Not effective for germicidal applications

⚠ Note: 405 nm emits faint visible violet light and is NOT a germicidal wavelength.

3. Critical Safety Notice

- UVC and UVB radiation can cause severe eye injury and skin burns within seconds of exposure.
- Never operate without proper shielding, interlocks, or personal protective equipment (PPE).
- Direct human or animal exposure must be prevented by system-level design.
- Queendom does not guarantee disinfection efficacy — performance depends on dose, exposure time, airflow, and system geometry.

4. Compliance

- Photobiological Safety: IEC 62471:2006 – Risk Group 1 (Exempt) when used as intended
- Environmental: RoHS 3 (EU 2015/863), REACH SVHC-free
- Intended for industrial, commercial, or medical OEM integration only

5. Disclaimer

Queendom provides UV LED components as electronic parts. The buyer assumes full responsibility for:

- System safety design
- Regulatory compliance of end products
- Verification of application suitability
- Adherence to local laws (e.g., FDA, CE, China RoHS)

© 2026 Queendom Optoelectronics Co., Ltd.

This statement applies to all UV LED products unless otherwise specified in individual datasheets.

