

LED UV

ADVANCED CONTEMPORARY UV
SOLUTIONS WITH PATENTED DESIGN FOR
WATER, INDUSTRY, MEDICAL AND
BIOSCIENCE



UV LED PRODUCT SERIES
WATER DISINFECTION APPLICATIONS

- ⇒ CONSULTING
 - ⇒ DESIGN
- ⇒ MANUFACTURE
 - ⇒ QUALITY
 - ⇒ SALES
- ⇒ SERVICE SUPPORT



TruSpectra

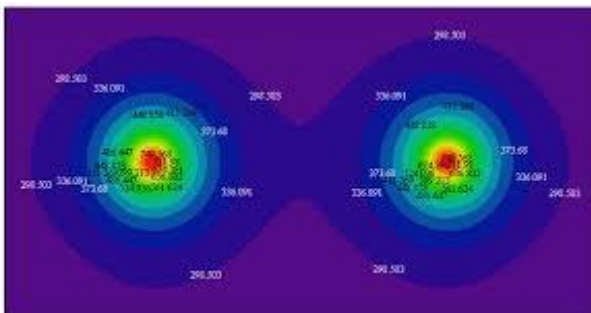
ADVANCED UV LED SOLUTIONS WITH CONTEMPORARY DESIGN

INNOVATION & QUALITY

Verentia relies on high-quality materials and precise workmanship to produce high quality UV systems be it for Bio Science, Curing, printing or Disinfection market. Verentia has developed an innovative UV LED dryer for curing all types of UV coating and adhesives. Depending on the material requirement, the system is available with UV LED curing lamps. Thanks to its compact design, the system can be adapted to suit any production environment



HIGH STANDARDS IN DESIGN, MANUFACTURING AND QUALITY



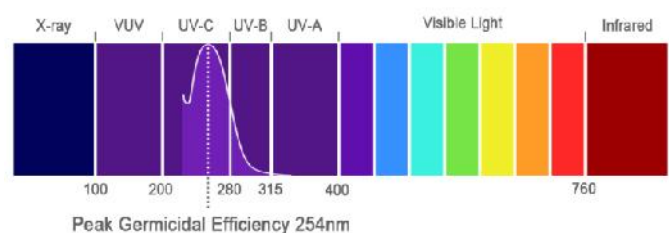
Industrial and medical fraternity at hospitals encounter various tasks, surgeries, examinations and treatments. Hygiene in the workplace is almost constantly challenged. Disinfection Performance and reliability of medical equipment is therefore especially paramount., at the same time, the subject of economic efficiency gains in importance. Intelligent and high quality disinfection solutions help to reduce ongoing operational costs significantly at the

PROUCT DESIGN AND FLEXIBILITY

The use of UV LED technology permits high Irradiance, optimized thermal design allows low heat build-up, a maintenance free service life, high efficiency, high Fluence and thus maximum economic viability. We do more than just design, develop, manufacture and supply electronic power supplies and UV lamps, we specializes in tailoring our UV/LED equipment to our customers' unique technology needs and business environments

HIGH IRRADIATION, DIFFERENT WAVELENGTH & COMPACT DESIGN

TruspectraUV comes with inbuilt high performance LED with high Irradiance factor to suit individual needs of the customer from 230nm to 405nm. TruspectraUV offers unparalleled ease in controlling different wavelength through specially designed electronics which is integrated inside the compact and aesthetic housing at the same time thermal engineering support long life and ease in maintenance.



**TruSpectra**

ADVANCED UV LED SOLUTIONS WITH CONTEMPORARY DESIGN

CHALLENGING APPLICATIONS

For the most challenging applications, off-the-shelf lighting solutions cannot deliver the performance you need to optimize your system. Often designed for a wide range of applications, these off-the-shelf products simply cannot deliver the same results as a custom LED solution that is designed specifically to meet your requirements

CHIP ON BOARD TECHNOLOGY

At Verentia, we utilize Chip-on-Board technology to create compact, high intensity and uniform LED light sources. We design and manufacture products, from intricate LED arrays to complex turnkey solutions, integrating custom optics, electronics, mechanics and software to provide the best possible solution.

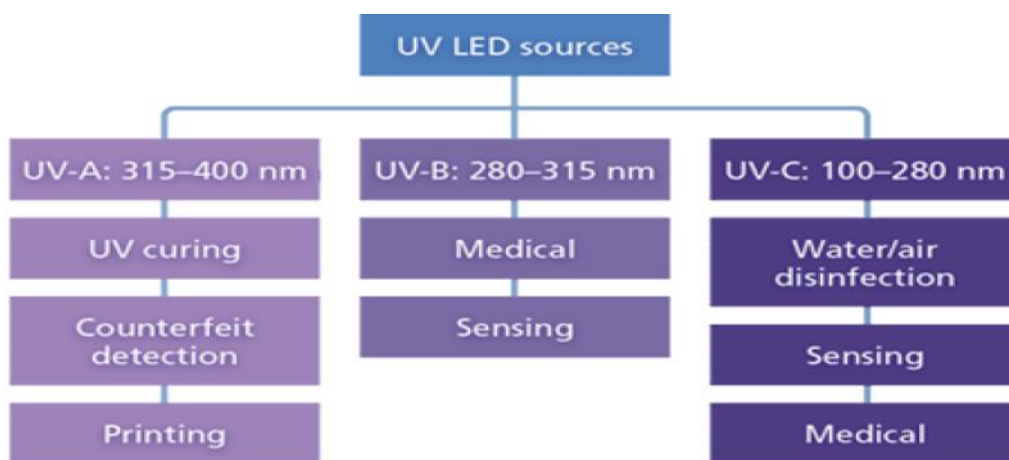
CUSTOM SOLUTIONS

Verentia strengths in LED engineering and related technology allow us to offer the widest range of wavelengths available on the market. We specialize in creating custom LED solutions that utilize multiple wavelengths or non-visible wavelengths such as UV & IR solutions. The strength of our relationships with LED suppliers means that we are always up-to-date with the latest in LED technology.



APPLICATIONS

Visible-spectrum LEDs have penetrated into TV and mobile backlighting, automotive, general lighting, signage, and other markets, ultraviolet (UV) LEDs are just beginning to replace incumbent UV sources in diverse applications, including curing, counterfeit detection, medical, sensing, printing, and water/air disinfection.



- 230 to 400 nm: optical sensors and instrumentation
- 230 to 280 nm: UV ID verification, barcodes
- 240 to 280 nm: sterilization of surface areas and water
- 250 to 405 nm: forensic and bodily fluid detection and analysis
- 270 to 300 nm: protein analysis, drug discovery
- 300 to 320 nm: medical light therapy
- 300 to 365 nm: polymer and ink printing
- 375 to 395 nm: counterfeit detection
- 390 to 410 nm: superficial / cosmetic sterilization



TruSpectra

EXPERIENCE THE FUTURE OF WATER DISINFECTION

Clean water has been a struggle for parts of the world for centuries. Increased adoption of UV-C LED water disinfection technologies in the developed world will indeed benefit the developing world and increase the accessibility of disinfection technology. Increased volume in the developed world will increase the affordability of this technology for developing nations.

- ◇ Designed for 4 Log reduction for microbial air and water treatment
- ◇ Long lasting and efficient light source, high performance aerodynamic light housing, narrow beam optical source with in-built electronic controller system.
- ◇ Exceptionally high UV Fluence and Irradiance, with lower losses and high thermal performance.
- ◇ Ideally for Industry water purification, residential, hotel and resorts, hospital and educational institutes, Airports and any application where there is need for clear and germ free water
- ◇ Compact design and virtually maintenance free.
- ◇ Chemical free water disinfection
- ◇ Environmental friendly solutions





^TruSpectra

ADVANTAGES OF UV LED OVER UV MERCURY LAMPS

Ultraviolet light has become a star player in the disinfection world. It is increasingly being used in key applications that require alternative disinfection options. UV disinfection has several advantages including:

Chemical free. UV provides physical treatment without the use of harmful chemicals. No DBPs. No risk of harmful disinfection byproducts being generated as with chemical treatment

Efficient pathogen inactivation. UV is very effective against a wide range of waterborne pathogens, including chlorine-resistant organisms such as *Cryptosporidium* and *Giardia*.

Mercury free. Conventional UV lamps contain mercury, but UV LEDs are free of hazardous materials, which eliminates the risk of a mercury spill due to a lamp breakage.

Compact footprint. High-power-density UV-C LEDs and advanced controls allow for a much smaller footprint compared to traditional UV systems.

Instant on/off. Systems are intermittent-flow friendly and can instantly be switched on and off without any warm-up time requirements. This also enhances power savings and leads to a prolonged lamp life.

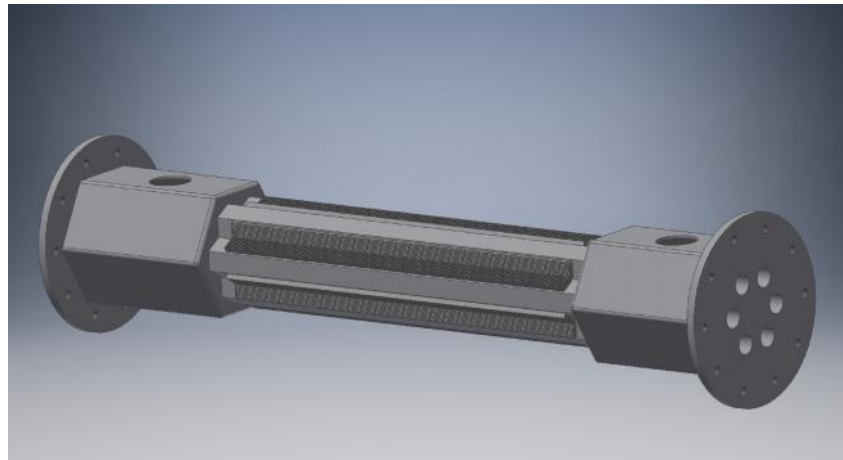
Temperature independent. LEDs do not transfer heat into the water, thus limiting lamp fouling and ensuring a constant UV output, regardless of water temperature.

Low maintenance. Robust technology that is easy to use and maintain.



TruSpectra

SPECIFICATIONS HIGH FLOW RATE UV LED WATER DISINFECTION SYSTEMS



Model	VERT-HF-50	VERT-HF-100	VERT-HF-250
Fluence Delivered	20mJ/cm ²	20mJ/cm ²	20mJ/cm ²
Microbial Inactivation	4 log >99.99%	4 log >99.99%	4 log >99.99%
Water Flow Rate/ module	50 liter/min (3 m ³ /hr)	100 Liter/min (6m ³ /Hr)	250 Liter/min (15m ³ /Hr)
Operating Voltage	8 VDC	8 VDC	230VAC
System Power	50W	65W	80W
Length in mm	150 / 200	150 / 200	150 / 200
Modules	1/ 4/ 6 Nos	1 / 4 / 6 Nos	1 / 4 / 6 Nos
Warranty	1 year	1 year	1 year
Wavelength	265-285nm	265-285nm	265-285nm
Cartridge filter	Optional	Optional	Optional
Flange	ANSI B16.5	ANSI B16.5	ANSI B16.5
Fluid disinfection Applications	Water/DM Water/Distilled Water Carbonated Drinks/Fruit Juice Wine/beer/Alcoholic and non alcoholic beverages		



TruSpectra

SPECIFICATIONS OF UV LED WATER DISINFECTION SYSTEMS



Model	VERT-0.5LPM	VERT-1.0LPM
Fluence Delivered	20mJ/cm ²	20mJ/cm ²
Microbial Inactivation	4 log >99.99%	4 log >99.99%
Water Flow Rate	0.5 liter/min	1.0 Liter/min
Operating Voltage	8 VDC	8 VDC
System Power	6.6W	16W
Dimensions in mm	180 x 80 x 36mm	180 x 80 x 36mm
Warranty	1 year	1 year
Wavelength	265-285nm	265-285nm
Cartridge filter	Optional	Optional
Chrome tap with inbuilt IR	Optional	Optional





TruSpectra

SPECIFICATIONS OF UV LED WATER DISINFECTION SYSTEMS



Model	VERT-2.0LPM	VERT-3.0LPM
Fluence Delivered	40mJ/cm ²	40mJ/cm ²
Microbial Inactivation	4 log >99.9%	4 log >99.9%
Water Flow Rate	2.0 liter/min	3.0 Liter/min
Operating Voltage	8 VDC	8 VDC
System Power	21W	30W
Dimensions in mm	220 x 80 x 36mm	220 x 80 x 36mm
Warranty	1 year	1 year
Wavelength	265-285nm	265-285nm
Cartridge filter	Optional	Optional
Chrome tap with inbuilt sensor	Optional	Optional





TruSpectra

SPECIFICATIONS OF UV LED WATER DISINFECTION SYSTEMS



Model	VERT-5.0LPM	VERT-10.0LPM
Fluence Delivered	40mJ/cm ²	40mJ/cm ²
Microbial Inactivation	4 log >99.9%	4 log >99.9%
Water Flow Rate	2.0 liter/min	3.0 Liter/min
Operating Voltage	8 VDC	8 VDC
System Power	55W	80W
Dimensions in mm	220 x 80 x 36mm	220 x 80 x 36mm
Warranty	1 year	1 year
Wavelength	265-285nm	265-285nm
Cartridge filter	Optional	Optional
Chrome tap with in-	Optional	Optional





VERENTIA

VerentiaSol India Private Limited

Gat 1101, Pune Saswad Road,

Behind Vatika Ashram,

Wadki, Pune - 412308

Mobile +91-8169868690

Email: shree.katyayani@verentia.com

INTENTIONALLY LEFT BLANK

INTENTIONALLY LEFT BLANK

INTENTIONALLY LEFT BLANK