

Advanced Lamp Technology for Every HVAC Application

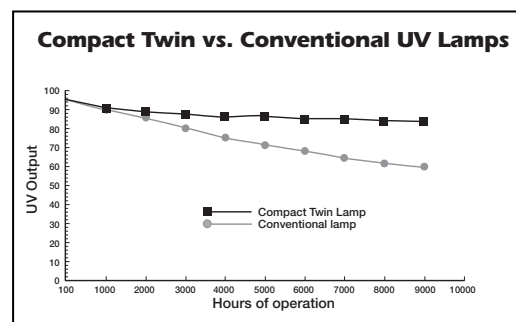
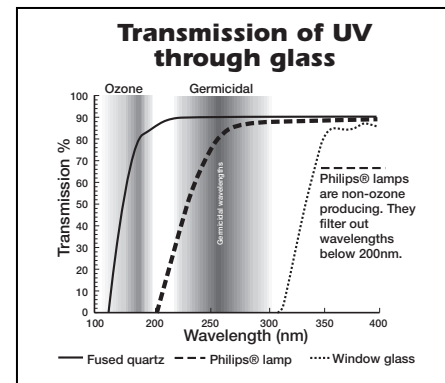
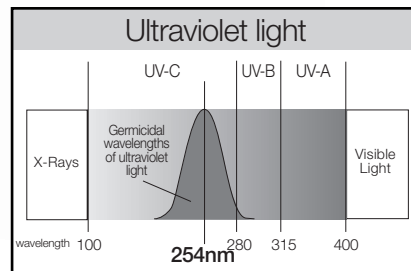
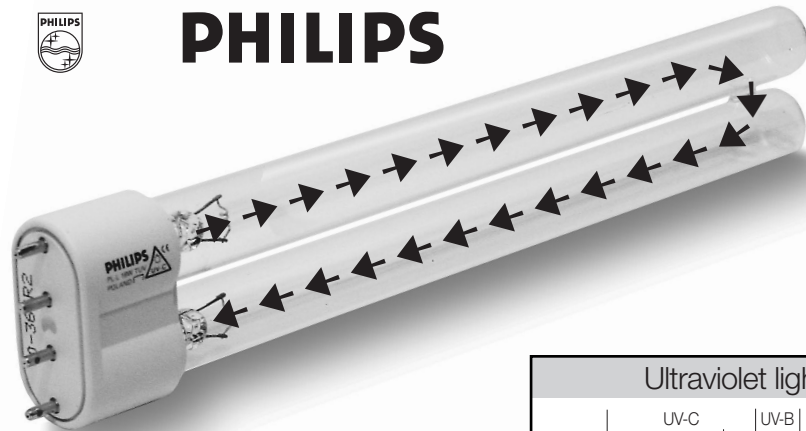
The Ultravation UVS and UVE standard series are fitted with Philips® Compact-Twin “U” shaped low pressure UV lamps. These germicidal lamps outperform in virtually

every aspect of the UV disinfection application. Philips® is one of the world's largest and most respected manufacturers of lamps for lighting and special applications such as

UV. A great deal of research and development has gone into the design of these lamps and their high performance is consistent with the design of Ultravation products.



PHILIPS



Compact-Twin design

The Philips® patented compact-twin UV lamp design is a very effective way to deliver the more intense dose of a longer UV lamp to a small space, such as an HVAC plenum or return duct. The design effectively “bends” what would be a lamp twice as long, in half.

Non-Ozone Producing

Just as 254nm wavelength of UV is germicidal, the 185nm wavelength reacts with the air to produce ozone. Ozone is an irritant and is toxic in large doses. Philips developed a special, patented lamp composition that effectively filters the 185nm wavelength, while allowing the 254nm wavelength to pass through.

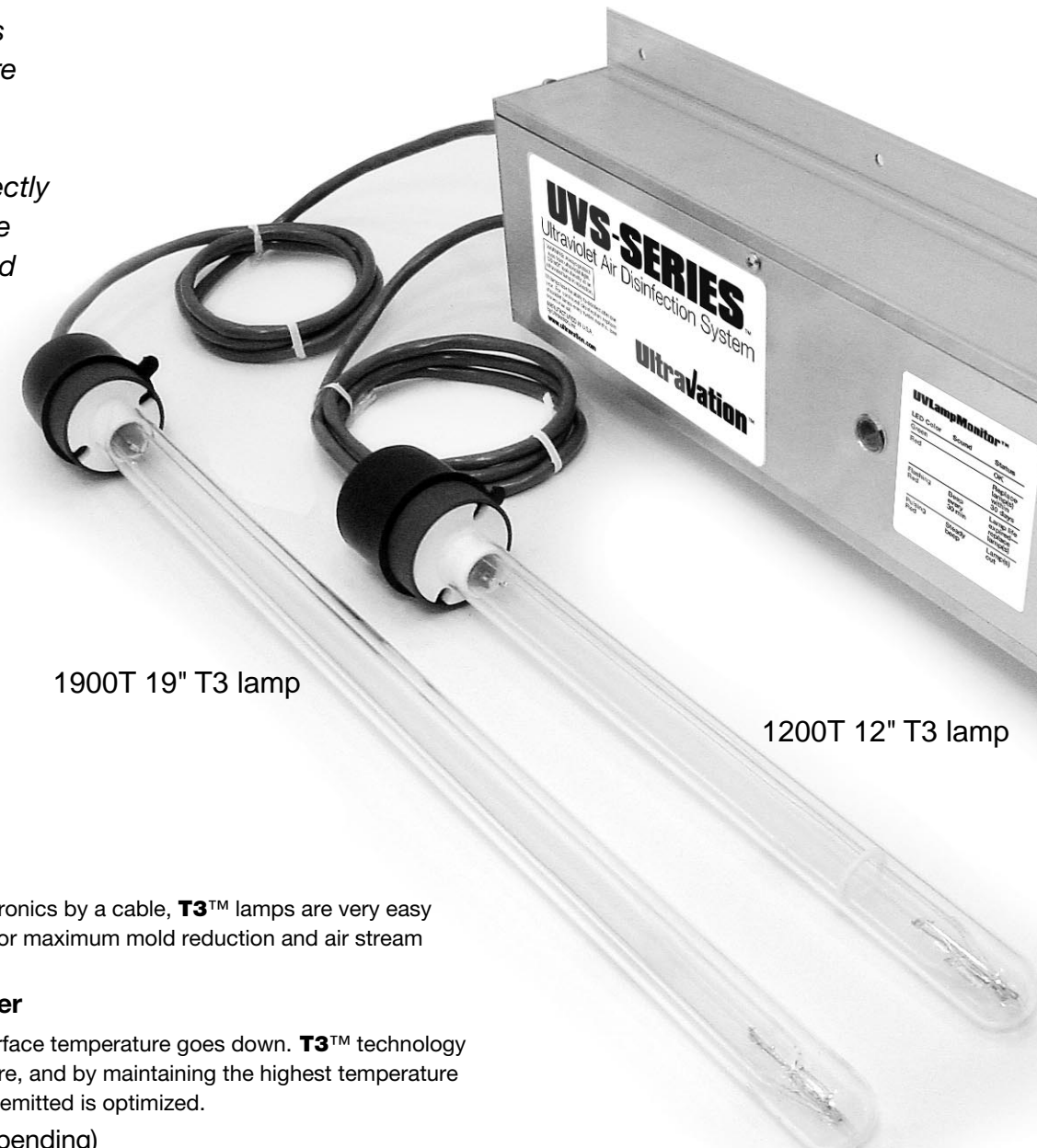
More disinfection power over the life of the lamp

UV lamps have a useful lifetime of about 9000 hrs (about one year), before they become solarized and the UV output diminishes to unacceptable levels. Conventional lamps lose up to 40% of UV disinfection power over lamp life. Philips® lamps will deliver up to 85% disinfection power at the end of lamp life providing more uniform disinfection power over the life of the equipment, when the lamps are changed annually.

Environmentally friendly

UV lamps operate similarly to standard fluorescent lamps by passing electrical current through a mercury vapor stream. The mercury content in some conventional lamps may qualify them as hazardous waste. Philips leads the industry with UV lamps that use far less mercury—only 5mg compared to up to 50mg used in many conventional lamps. Just like everyday fluorescent lamps, all UV lamps should be recycled. Call us for more information about our free lamp reclamation program.

The Ultravation UVS-Series remote lamp models feature **T3™**, Thermal Transfer Technology™ UV lamps. These lamps are install directly in an HVAC system with the control electronics mounted elsewhere, allowing UV air disinfection to be installed in even the toughest-to-fit HVAC system.



1900T 19" T3 lamp

1200T 12" T3 lamp

T3™ Lamps offer several important benefits including:

Installation Flexibility

Connected to the UVS-Series electronics by a cable, **T3™** lamps are very easy to place in just the right location—for maximum mold reduction and air stream disinfection.

Optimized disinfection power

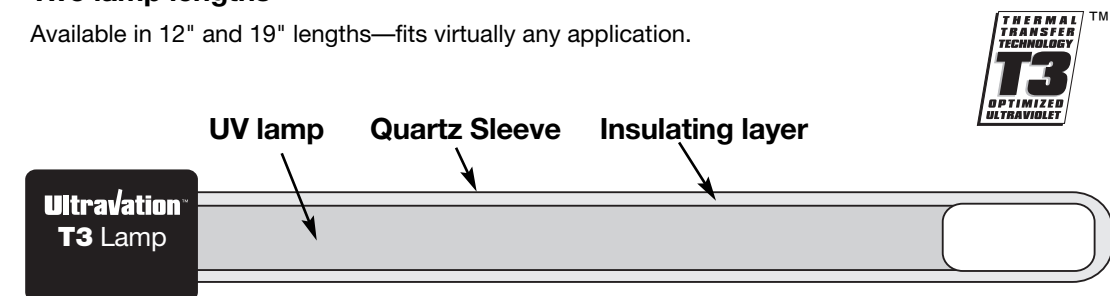
UV intensity diminishes as lamp surface temperature goes down. **T3™** technology maximizes lamp surface temperature, and by maintaining the highest temperature possible, the amount of UV energy emitted is optimized.

Safety interconnect (patent pending)

T3™ lamps cannot be removed for replacement without disconnecting the power to the lamp, preventing accidental UV exposure with changing lamps.

Two lamp lengths

Available in 12" and 19" lengths—fits virtually any application.



A **T3™** lamp is a UV lamp encased in a quartz glass sleeve. The insulating layer of air between the sleeve and the lamp allows the surface temperature on the lamp to be maximized. These lamps generate more UV than conventional UV lamps.

