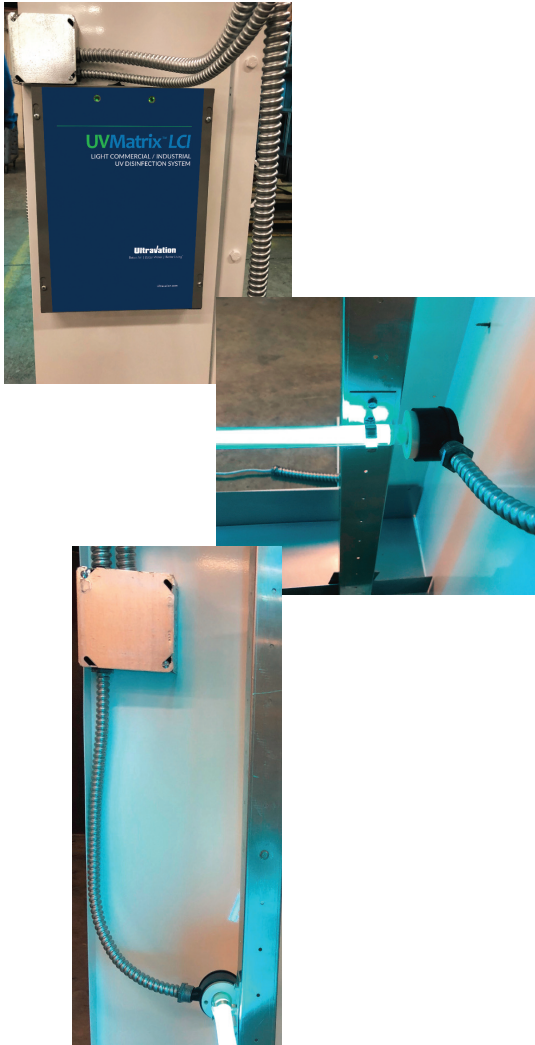


# UVMatrix™ LCI-T3

## Light Commercial Irradiation Kit

Commercial / Industrial HVAC Systems

### Product Information



#### UVC eliminates mold on AC coils

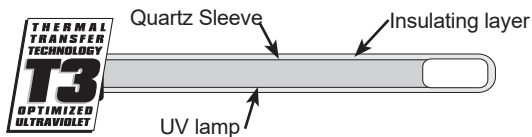
Mold can be a serious problem for allergy sufferers—and a drain on HVAC efficiency. Ultravation UVMatrix™ LCI systems for light commercial and industrial HVAC, deliver the highest level of performance and safety in UV air disinfection. Their design reflects Ultravation's in-depth knowledge of ultraviolet light—and how it is optimized for HVAC coil disinfection.

#### UVMatrix LCI—Installation flexibility

The LCI-Series is a complete, flexible and easy-to-install design. Simply Install the Powder Coated NEMA 3R Control Panel outside the air handler to keep the power supplies from the wet environment. Then Install the UVC lamps perpendicular to the coil fins at a maximum spacing of 24" between lamps and maximum distance of 12" from top and bottom of the cooling coil.

#### T3™ Enhanced UV Lamps

Ultravation T3™ thermally optimized germicidal UVC lamps are standard, allowing much higher UVC lamp output in cold air conditions.



#### ESP™ Electronic-Smart Power

UVMatrix-LCI systems utilize discrete ESP™ electronic power supplies — eliminating the possibility of complete loss of disinfection due to UV system trouble. ESP™ optimizes lamp performance because it operates at frequencies far exceeding a standard magnetic ballast. Its exceptional stability of voltage and current flow maximizes lamp output and lamp life. In a lamp-out situation, it automatically protects itself from an un-loaded condition.

#### UVMatrix™ LCI Kit Includes..

- NEMA 3R Control Panel
- T3™ Enhanced UV Lamps
- Lamp mounting hardware
- 3' UVC Shielded Lamp Leads

Available from:

#### Additional features...

- Low power consumption
- Lamp life expectancy 18,000 hrs (approx 24 months)
- Available in 32" or 62" lamp to bathe entire coil width with minimum replacement lamps
- 10 year UVC system warranty Covers entire unit except lamp.
- One year UV lamp warranty
- T3 enhanced lamp systems.

#### Available Options

- LED Indicator of Lamp Status
- Full Lamp Shields (should only be used to block UVC lamps if needed)
- Expandable Vertical Support Bracket Kit
- Limit Switch for access panels to disengage power if door is opened

Ultravation, Inc.  
P.O. Box 165  
Poultney, Vermont 05764  
Toll Free 1-866-468-8247  
FAX 1-802-287-9203

[www.ultravation.com](http://www.ultravation.com)

© 2018 ULTRAVATION, INC. UVMATRIX\_LCI\_SPECSHEET / REV1218

DC-IH-0030

**Ultravation®**  
Professional Indoor Air Quality Products

# UVMatrix™ LCI-T3

## Light Commercial Irradiation Kit

Commercial / Industrial HVAC Systems

### Specification Sheet

#### 1. Scope of Supply

The UVMatrix LCI-T3 equipment shall consist of UVC Lamps encapsulated within a protective quartz sleeve assembly, a powder coated NEMA 3R control panel, 3 foot UVC shielded lamp leads with two mounting plates with clips per lamp and associated hardware.

##### A. UVC Lamps

- i. A lamp and protective quartz sleeve assembly shall be utilized in cold air conditions to provide maximum thermal optimization of the germicidal UVC Lamps.
- ii. The UVC lamps shall be slimline type, T5 diameter, 2G11 type base, and will produce broad-band UVC of 250-260nm.
- iii. The UVC lamps shall produce 85% of the initial UVC output at end of lamp life (9000 hours), or 70% of initial UVC output at extended life (18,000 hours).

##### B. Control Panel

- i. Control panel shall be auto-sensing between 120VAC to 277VAC and operate at either 50 or 60Hz.
- ii. Control panel shall be powder coated, NEMA 3R enclosure with ON/OFF switch to control each bank of lamps.
- iii. Control panel shall draw no more than 150 Watts for 2 lamp systems and 300 Watts for 4 lamp systems.

##### C. Installation Components

- i. Each unit shall include control panel to be mounted outside the airstream.
- ii. Each unit shall include the appropriate quantity and length T3 UVC Lamps with mounting plates that include lamp clips to securely hold each end of the UVC lamp into desired location.
- iii. Each unit shall include a 3' UVC Shielded lamp lead that connects to an electrical box. This lamp lead shall seat over the lamp base to ensure connection is stable.

#### 2. Installation

- A. Control Panel is hard wired to incoming power to air handler - the UVC lamp should not cycle with the air handler blower.
- B. The lamps need to be positioned to bathe the entire surface of the coil. Lamp lengths and quantities are determined by the height and width of the evaporator coil. One row of UVC lamps is suitable for coils up to 30" high and the lamps. For this height coil the lamp (or lamps, depending on the coil width) should be centered on the coil. For higher coils divide the coil height by 2 and that is your lamp spacing. Divide your spacing by 2 and this is how far from the top and bottom of the coil your lamps start. This works for coils up to 48" high.  
  
Once the lamp placement is determined the lamp mounting plates with clips must be affixed to either the coil frame, vertical supports or Ultravation's Expandable Vertical Support Bracket Kit.
- C. Connect the lamp lead to the end of the lamp and route the lamp lead back to the electronic box. The lamp lead has a 1/2" conduit connector supplied to connect to the electrical box. From the electrical box back to the control panel 14AWG wire must be used. The longest run between the control panel and the electrical box is 15'.