

# Ultravation UVMatrix 4X Specification Sheet

## 1. Scope of Supply

The outdoor rated UV equipment shall consist of a NEMA 4X fiberglass enclosure, UVC Lamp(s), quartz sleeve assembly, and an electronic power supply.

### a. Power Supply Housing

- i. The power supply housing shall be NEMA 4X rated.
- ii. The power supply housing shall be lightweight and constructed of fiberglass.
- iii. All electrical connections shall be housed inside the power supply housing.

### b. UVC Lamps

- i. One or two UVC Lamp(s) and a protective quartz sleeve assembly shall be utilized in cold air conditions to provide maximum thermal optimization of the germicidal UVC Lamps
- ii. The quartz sleeve assembly, when screwed into the back panel inside the power supply housing, shall have no wires or electrical connections exposed to the UV radiation, or the air handler internal environment.
- iii. The UVC Lamps shall be Slimline type, T5 diameter, 2G11 type base, and will produce broadband UVC of 250-260nm.
- iv. 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).

### c. Electronic Power Supply

- i. Electronic power supplies shall operate on universal voltages from 120VAC to 277VAC at either 50 or 60Hz.
- ii. Electronic power supplies shall have a power factor of greater than 96%.
- iii. Maximum power consumption shall be no more than 0.50A @ 120V.

## 2. Installation

- a. Determine a suitable location to install unit. Air handler or Ductwork should be of sufficient strength as to support the unit; otherwise reinforcement of the mounting location may be necessary.
- b. Mark hole location and using a 1 1/4" hole saw, cut 1 or 2 hole(s).
- c. Lift UVC equipment into place against air handler or ductwork. Fasten unit in place with self-tapping screws or standard hardware.
- d. Install the quartz assembly by inserting it into unit and screwing into back panel until hand tight against enclosure. Slide lamp into quartz assembly. Push socket onto lamp base.
- e. Make electrical connections. THIS SHOULD BE DONE IN ACCORDANCE WITH ALL STATE AND LOCAL ELECTRICAL AND BUILDING CODES.
- f. Turn on unit and inspect operation.

## 3. Optional Equipment

- a. UVC lamp monitor – Provided with dry contacts to indicate lamp operation status.
- b. UVC intensity monitor – 0-100% meter, measuring 254nm UVC, includes dry contacts that switch state when adjustable set point is reached.