

## PEK - PACKAGED EQUIPMENT KIT UV SYSTEMS

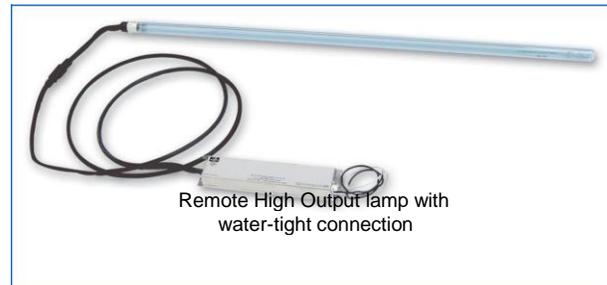
**PEK High Output UV** germicidal fixtures are designed specifically for fan coils, Packaged Terminal Air Conditioners (PTAC), classroom unit ventilators, packaged split systems and other similar room unit systems. The PEK systems use practical and effective UVC technology to overcome the Indoor Air Quality (IAQ) challenge other small in-room packaging equipment hasn't been able to solve because they're often equipped with low-efficiency filters that cannot effectively capture infectious contaminants or mold. In addition, because of

space and airflow limitation, many of these other units cannot be retrofitted with high-efficiency filtration.

### Applications

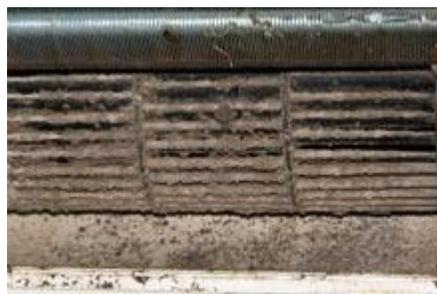
PEK fixtures feature lamps that illuminate cooling units with high-output (800mA) UVC energy that eliminates surface contaminants (mold, bacteria and other microbial biofilms) and reduce infectious airborne microbial contaminants, bringing improved IAQ to hotel/motel rooms, dormitories, offices, patient rooms, classrooms and other similar rooms.

**PEK Fixtures** utilize high-output "green" lamps ( $\leq 8$  mg of mercury; 2-year guarantee) with five-year ballasts (non-prorated 5-year warranty) into a convenient kit that delivers the best and longest-lasting UVC performance available. Independent tests show that the PEK fixtures deliver greater output than any other ultraviolet devices under HVAC operating conditions (45° F at 400 fpm air velocity), and the increased output of our lamps provide the most reliable germicidal performance and longest service life.



Mold Growth Before UV Installation

Each PEK UV system contains one "green" UVC Lamp, one 5-year ballast, and all necessary hardware components to retrofit the room unit with UVC, including wire, holding clips, mounting screws



Mold Growth on Blower Wheel

and wire ties - the space-saving, snap-in design fits all major brands. The cell lamps come in lengths of 14, 16, 20, 24, 36, 48 and 60 inches to meet different size requirements. The correct quantity of kits and/or lamp lengths must be selected to irradiate the entire coil.

**Features and Benefits** of PEK UV systems installation:

- Improves Indoor Air Quality (IAQ) by reducing bacteria, viruses, mold and spores that either grow or pass through the air handling systems. Reduces the risk of cold, flu, allergies and other illness associated with air handling systems
- “Green” lamps contain  $\leq 8$ mg of mercury



Clean AC with PEK UV Fixture Installed

- Two-year (17,000 hours) guarantee on lamps with only 20% decrease in UV output over the two years
- Five-year, non-prorated warranty on the ballast
- Continuously cleans coils, drain pans, plenums and ducts - eliminating costly cleaning programs and the use of harmful chemicals and disinfectants
- Water tight connections for lamp and wiring
- Reduces HVAC energy costs by restoring heat transfer and net cooling capacity
- Produces no ozone or any other secondary contaminants
- Quick and easy snap-in installation

**SPECIFICATIONS:**

The PEK series lamp and power supply is factory assembled and tested. Each kit shall consist of a power supply, lamp cord and high-output lamp.

**BALLAST:** The solid-state ballast (furnished with this kit) is a Class P rapid start with a power factor minimum of .95. It is available as a 120, 208, 230 or 277 VAC 50/60 Hz, single phase, and is designed to maximize photon production in air temperatures of 35-170° F. Minimum ballast start temperature is – 20 degrees F. Ballasts have a RFI - EMI rating as defined by FCC part 18A for industrial/commercial applications in regards to suppression. Ballast is UL listed for use in HVAC applications.

**LAMPS:** PEK series lamps are high-output (800mA), T5 diameter, and constructed from hard glass tubing for superior UV transmittance. Lamps are “green,” containing  $\leq 8$ mg of mercury and they produce no ozone. Lamps shall retain, at a minimum, 80% of initial output after 2 years (17,000 hours) of use. They are sealed for moisture protection with a water-tight connection. Electrodes are designed to maximize plasma convection and stability for superior lamp performance and life. Lamps are rated to produce  $11.7 \mu\text{W}/\text{cm}^2$  per linear inch of lamp arc length at a distance of one meter in a 45° F and 400 fpm airstream.

**KIT COMPONENTS:** The wire shall be UV-resistant and rated for installation in an HVAC system. The spring mounting clips shall be provided with mounting screws and custom designed to hold the UVC Lamp without damaging the tube during installation or replacement.

INDEPENDENT TESTING: Units are tested by an independent test laboratory in accordance with the general provisions of IES Lighting Handbook, 1981 Applications Volume, and provide output per inch of glass of not less than 11.7  $\mu\text{W}/\text{cm}^2$  at 1 meter in a 400 fpm airstream of 45° F.

### Technical Data

| Models     | Lamp Length | Lamp   | Voltage | Ballast Dims (in)   | Amp Draw |
|------------|-------------|--------|---------|---------------------|----------|
| PEK-18-120 | 16"         | GCL-18 | 120     | 1.00 x 1.72 x 8.60  | 0.25     |
| PEK-18-230 | 16"         | GCL-18 | 208/230 | 1.00 x 1.72 x 9.60  | 0.15     |
| PEK-18-277 | 16"         | GCL-18 | 277     | 1.00 x 1.72 x 9.60  | 0.10     |
| PEK-24-120 | 22"         | GCL-24 | 120     | 1.00 x 1.72 x 8.60  | 0.60     |
| PEK-24-230 | 22"         | GCL-24 | 208/230 | 1.00 x 1.72 x 9.60  | 0.35     |
| PEK-24-277 | 22"         | GCL-24 | 277     | 1.00 x 1.72 x 9.60  | 0.30     |
| PEK-36-120 | 34"         | GCL-36 | 120     | 1.00 x 1.72 x 8.60  | 0.80     |
| PEK-36-230 | 34"         | GCL-36 | 208/230 | 1.00 x 1.72 x 9.60  | 0.40     |
| PEK-36-277 | 34"         | GCL-36 | 277     | 1.00 x 1.72 x 9.60  | 0.35     |
| PEK-48-120 | 46"         | GCL-48 | 120     | 1.00 x 1.72 x 8.60  | 1.15     |
| PEK-48-230 | 46"         | GCL-48 | 208/230 | 1.00 x 1.72 x 9.60  | 0.60     |
| PEK-48-277 | 46"         | GCL-48 | 277     | 1.00 x 1.72 x 9.60  | 0.50     |
| PEK-60-120 | 58"         | GCL-60 | 120     | 1.00 x 1.72 x 19.25 | 1.60     |
| PEK-60-230 | 58"         | GCL-60 | 208/230 | 1.00 x 1.72 x 19.25 | 0.80     |
| PEK-60-277 | 58"         | GCL-60 | 277     | 1.00 x 1.72 x 19.25 | 0.70     |

**GTLK** High Output UV germicidal fixtures feature shatter-proof coated lamps. The GTLK are designed specifically for fan coils, Packaged Terminal Air Conditioners (PTAC), classroom unit ventilators, packaged split systems and other similar room unit systems.

**Applications:** AAWGTLK fixtures feature lamps that illuminate cooling units with high-output UVC energy that eliminates surface contaminants (mold, bacteria and other microbial biofilms) and reduce infectious airborne microbial contaminants, bringing improved IAQ to hotel/motel rooms, dormitories, offices, patient rooms, classrooms and other similar rooms.



Shatterproof coated UV lamp

AAWGTLKH0/14T/120-277 Fixtures utilize high-output germicidal ultraviolet lamps with universal electronic ballasts into a convenient kit that delivers the best, long lasting UVC performance.

**GTLK UV Fixtures** come with five-year non-prorated warranty on the ballasts.



UV system mounting clips

Each AAWGTLKHO/14T/120-277 UV system contains one 14" Fluoro Ethylene Polimere coated shatterproof high output UVC Lamp AAWHO/14, one universal electronic ballast, and all necessary hardware components to retrofit the room unit with UVC, including wire, holding clips, mounting screws and wire ties - the space-saving, snap-in design fits all major brands.

GTLK fixtures feature shatterproof Fluoro Ethylene Polymer coating on GTL lamps that replaces the outer quartz sleeve used for lamps in the PEK Series. GTLK fixtures use the same ballasts, and are available in similar lengths and voltages, as PEK fixtures.



Remote High Output lamp with moisture resistant connection

### GTLK Technical Specs

| Model                        | Description  | Lamp             |
|------------------------------|--|------------------|
| <b>AAWGTLKHO/14T/120-277</b> | 50/60Hz Packaged Equipment Kit w/14" shatterproof lamp, 120/240/277V | <b>AAWHO/14T</b> |
| <b>GTLK-18-120</b>           | Packaged Equipment Kit w/18" shatterproof lamp, 120V                 | <b>GTL-18</b>    |
| <b>GTLK-18-230</b>           | Packaged Equipment Kit w/18" shatterproof lamp, 208/230V             | <b>GTL-18</b>    |
| <b>GTLK-18-277</b>           | Packaged Equipment Kit w/18" shatterproof lamp, 277V                 | <b>GTL-18</b>    |
| <b>GTLK-24-120</b>           | Packaged Equipment Kit w/24" shatterproof lamp, 120V                 | <b>GTL-24</b>    |
| <b>GTLK-24-230</b>           | Packaged Equipment Kit w/24" shatterproof lamp, 208/230V             | <b>GTL-24</b>    |
| <b>GTLK-24-277</b>           | Packaged Equipment Kit w/24" shatterproof lamp, 277V                 | <b>GTL-24</b>    |
| <b>GTLK-36-120</b>           | Packaged Equipment Kit w/36" shatterproof lamp, 120V                 | <b>GTL-36</b>    |
| <b>GTLK-36-230</b>           | Packaged Equipment Kit w/36" shatterproof lamp, 208/230V             | <b>GTL-36</b>    |
| <b>GTLK-36-277</b>           | Packaged Equipment Kit w/36" shatterproof lamp, 277V                 | <b>GTL-36</b>    |
| <b>GTLK-48-120</b>           | Packaged Equipment Kit w/48" shatterproof lamp, 120V                 | <b>GTL-48</b>    |
| <b>GTLK-48-230</b>           | Packaged Equipment Kit w/48" shatterproof lamp, 208/230V             | <b>GTL-48</b>    |
| <b>GTLK-48-277</b>           | Packaged Equipment Kit w/48" shatterproof lamp, 277V                 | <b>GTL-48</b>    |
| <b>GTLK-60-120</b>           | Packaged Equipment Kit w/60" shatterproof lamp, 120V                 | <b>GTL-60</b>    |
| <b>GTLK-60-230</b>           | Packaged Equipment Kit w/60" shatterproof lamp, 208/230V             | <b>GTL-60</b>    |
| <b>GTLK-60-277</b>           | Packaged Equipment Kit w/60" shatterproof lamp, 277V                 | <b>GTL-60</b>    |

### Replacement Lamps & Ballasts for the GTLK systems

| Model            | Description                                    |
|------------------|--|
| <b>AAWHO/14T</b> | 14" shatterproof lamp                          |
| <b>GTL-18</b>    | 18" shatterproof lamp                          |
| <b>GTL-24</b>    | 24" shatterproof lamp                          |
| <b>GTL-36</b>    | 36" shatterproof lamp                          |
| <b>GTL-48</b>    | 48" shatterproof lamp                          |
| <b>GTL-60</b>    | 60" shatterproof lamp, 208/230V                |
| <b>TXG270</b>    | Ballast for 120V Fixtures (except GTLK-60)     |
| <b>TXG275</b>    | Ballast for 230/208V fixtures (except GTLK-60) |
| <b>TXG280</b>    | Ballast for 277V fixtures (except GTLK-60)     |
| <b>TXG285</b>    | Ballast for 120V GTLK-60 Fixtures              |
| <b>TXG290</b>    | Ballast for 230V GTLK-60 Fixtures              |
| <b>TXG295</b>    | Ballast for 277V GTLK-60 Fixtures              |