Packaged Equipment Kit (PEK) Series

American Ultraviolet High Output PEK Series 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 Series uses 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 disease 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 Series 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 Series Fixtures package American Ultraviolet's high-output "green" lamps (≤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 American Ultraviolet 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.

Each PEK Series kit 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 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.

Lamp Output % over 17,000 Hours



Benefits

- Improves Indoor Air Quality (IAQ) by reducing bacteria, viruses and mold that either grow or pass through the packaged equipment. Reduces the risk of cold, flu, allergies and other illnesses associated with room unit HVAC systems
- High-output, "green" lamps contain ≤ 8 mg of mercury
- Two-year (17,000 hours) guarantee on lamps with only 20% decrease in output over the two years
- Five-year non-prorated warranty on the ballast
- Water tight connections for lamp and wiring
- Reduces HVAC energy costs by restoring heat transfer and net cooling capacity
- Continuously cleans coils and drain pans, eliminating costly cleaning programs and the use of harmful chemicals and disinfectants
- Produces no ozone or other secondary contaminates
- Quick and easy snap-in installation





Packaged Equipment Kit (PEK) Series Fixtures

PEK SERIES SPECIFICATIONS:

The PEK series lamp and power supply is factory assembled and tested in the USA prior to shipment. 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 minus 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 < 8mg 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 μ W/cm² 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 $11.7~\mu\text{W/cm2}$ at 1 meter in a 400 fpm airstream of 45° F.

PEK Series Fixtures are ideal for use in:

- Packaged Terminal Air Conditioners (PTAC)
 - **Classroom Unit Ventilators**
- Fan Coils
- Packaged Split Systems
- Applications With Limited Space Obstacles

New Shatterproof Option

GTLK Series fixtures feature a shatterproof FEP 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 identical lengths and voltages, as PEK Series fixtures.

ORDERING SPECIFICATIONS

Fixture	Lamp Length	Lamp Used	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

Represented by:

American Ultraviolet

Since 1960. It's all we do.

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