

Pen-Ray mercury lamps for UV application

Pen-Ray light sources are low-pressure cold cathode mercury UV lamps made from double-walled quartz tubes. The lamps are individually manufactured by experienced craftsmen to ensure the highest quality and reliability. They offer high spectral line accuracy and a long service life (over 3000 hours). Various light lengths and wavelengths are available. Thanks to their compact design and the single-sided arrangement of both electrodes, the lamps can be used in a wide range of applications.

Areas of application for Pen-Ray mercury lamps:

Longwave UV - 365 nm

Laboratory/Research

Bacterial Identification/Specimen Staining/Gel Electrophoresis/Chlorination/Fluorochemistry/Pesticide Analysis/Fluorescence Photography/Titration Processes/TLC/Nucleic Acid Visualization/Genetic Experiments/Rodent Contamination and Lice Detection/Detection of Food Contamination/Milkstone Inspection/E-Coli Water Testing/Culture Fluorescence Medical: Medical Diagnosis/Dermatology/Cosmetology

Education

Fluorescence Demonstration and Analysis

Industrial

Non-Destructive Testing/UV Curing/Magnetic Particle Inspection/Inspection of Conformal Coatings

Criminology

Detection of Altered Documents/Counterfeit Currency Detection/Signature Verification/Forensic Applications/Coding/Marking/Arson Investigation/Lab Testing

Electronics

Clean Room Inspection/Epoxy Coat/Quality Control/Inspection

Miscellaneous

Examination of Fine Art/Archaeology/Entomology/Photoresist Exposure/Philately/Re-Admission Control/Mineralogy

Automotive

Leak Detection/Windshield Repair



Midrange UV - 302 nm

Research

Gel Electrophoresis/Gel Viewing/Optical Lab Measurements

Industrial

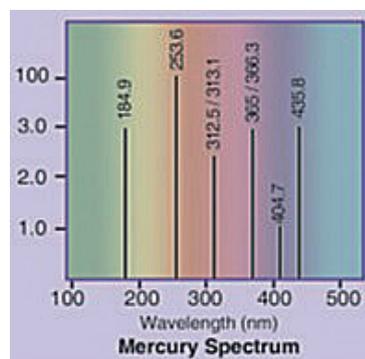
UV Curing/Gradient Sampling/Solar Experimentation

Medical

Phototherapy/Dermatological

Miscellaneous

Mineralogy/Art and Museum Inspection



Pen-Ray mercury lamps for UV application

Shortwave UV - 254 nm

Criminology

Document Examination/Field Clue/Arson Investigation/
Toxicology

Education

Fluorescence Demonstration and Analysis

Laboratory/Research

Fluorochemistry/Mercury Detectors/Optical Alignment/
Pesticide Analysis/Polymer Curing/DNA Analysis/
Biochemical Testing/Electrophoresis/TLC/Mutation/
Mycology/Nucleic Acid Visualization/Photochemistry/
Photo Disassociation

Miscellaneous

E-Coli Testing/Alumina Testing/Archaeology/Fluorescence
Photography/Mineralogy/Philately

Power supply units:	
Input voltage:	230VAC or 115VAC
Output voltage:	approx. 300VAC
Output current:	approx. 26mA
Dimensions:	approx. 154x123x93mm (LxWxH)
Connection:	Amphenol C016*

Standard Pen-Ray with cable connection:	
Peak wavelength:	254 nm
Glass bulb dimensions:	approx. 228 x 8.9 mm
Total length:	approx. 295 mm
Cable length:	approx. 1.4 m
Plug:	Amphenol C016*
Operating voltage:	approx. 680VAC
Operating current:	approx. 26 mA
Irradiance:	min 4 μ W/cm ² @ 25,4 mm distance, @ 27mA

QD Order Numbers:	
CPQ8401	Pen-Ray Mercury Lamps
CPQ8402	230VAC/50Hz Power Supply, Primary Current 1A
CPQ8421	115VAC/60Hz Power Supply, Primary Current 0.55A
(Other UVP Pen-Ray lamps with different sizes, wavelengths, and connections available upon request.)	

Other types available on request:				
Peak Emission	Lighted Length	Quartz Diameter	Handle Diameter	Lamp Length
302 nm	22.3 mm	9.2 mm	11.2 mm	79.5 mm
254 nm	57.2 mm	9.2 mm	11.2 mm	114.3 mm
254 nm	53.8 mm	6.5 mm	9.5 mm	117.3 mm
254 nm	228.6 mm	9.5 mm	12.7 mm	295.1 mm
254 nm	152.4 mm	9.5 mm	12.7 mm	218.9 mm
254 nm	53.8 mm	6.5 mm	9.5 mm	117.3 mm
351 nm	57.1 mm	6.5 mm	9.5 mm	117.3 mm
351 nm	57.1 mm	6.5 mm <td 9.5 mm	117.3 mm	
351 nm	95.3 mm	6.5 mm	9.5 mm	155.4 mm
254 nm	19.1 mm	6.5 mm	9.5 mm	82.6 mm
254 nm	23.8 mm	9.2 mm	11.2 mm	72.1 mm



Artikel-Nr:
CPQ8402 mit CPQ8401

Important Safety Information

Ultraviolet transilluminators and ultraviolet lamps are powerful sources of UV radiation that will cause damage to unprotected eyes and skin. Before operating any unit, be sure all personnel in the area are properly protected. Personnel should protect skin and eyes by wearing ultraviolet protection eyewear, gloves and clothing when operating the UV equipment.