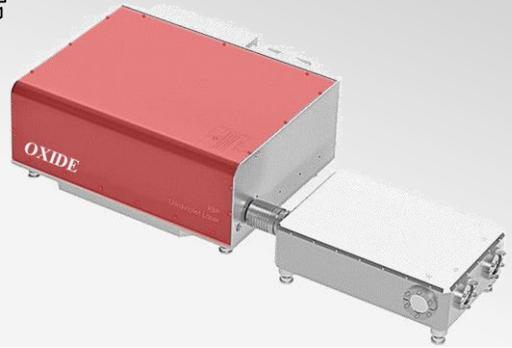


# VUV Laser Source

114nm Wavelength, 11eV Photon Energy



## Product Overview

PEV Series is a vacuum-ultraviolet (VUV) coherent light source specially designed for excitation light source for photoelectron spectroscopy (PES) applications. Based on OXIDE's deep-ultraviolet laser technology, this VUV light source has been developed. High energy photons with superior focusing quality will contribute to revealing new material characteristics on a local areas at anytime. Integrating the laser system onto an adjustment plate have made VUV light source easily aligned with an Angle-Resolved Photoemission Spectroscopy (ARPES) or TOF analyzer. Therefore, high energy photon source for developing materials such as battery materials, semiconductor materials and nanomaterials can be easily built or added.

## Features

- OXIDE's 11eV laser output is coherent thus can be focused on the target sample with a single lens (micro focus option available).
- By integrating all the optics into one unit, intensive adjustment of the equipment on-site is not required. Thus, the lead time from the delivery of the equipment to start photoelectron spectroscopy can be shortened.
- PEV Series VUV Laser Source is reliable with industrial quality while it is intended for research applications.

## Specifications

Model	PEV-H	PEV-L
Photon energy	11 eV *1	
Energy resolution	≦ 0.6 meV	
Repetition rate	50 ± 5 MHz	5 MHz *2
Output power *3	≧ 5 μW	≧ 3 μW
Pulse bandwidth	≦ 30 ps	
Features	Peak power is suppressed so that the space charge effect is reduced	Factory pre-set repetition rate can be selectable for the customer's TOF application.*2

\*1 Corresponds to 114nm light wavelength    \*2 Setting from 0.5 MHz – 5 MHz available    \*3 Initial output power

## Applications

- Photoelectron spectroscopy

ARPES	Excitation light source of Angle-Resolved Photoemission Spectroscopy
TOF	Excitation light source for photoelectron spectrometer

