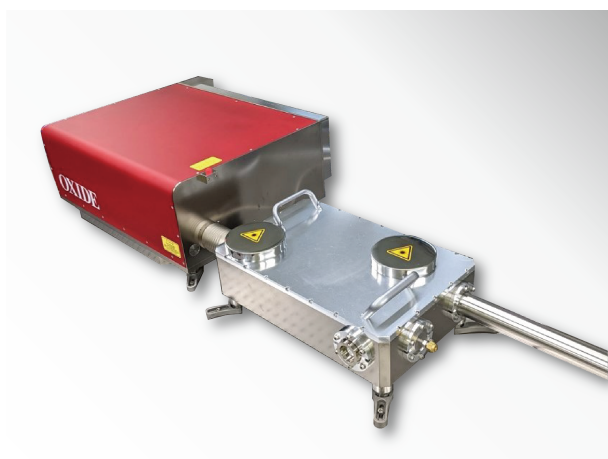


OXIDE Pulsed Vacuum-UV Laser

OXIDE's VUV Laser Source (PEV Series) is a vacuum-ultraviolet (VUV) coherent light source specially designed for excitation light source for photoelectron spectroscopy (PES) applications. It is developed based on OXIDE's deep-ultraviolet laser technology.

By integrating the VUV light source with an Angle-Resolved Photoemission Spectroscopy (ARPES) and TOF analyzer, for example, new material development tools to develop such as battery materials and nanomaterials can be built. It can also contribute to realize entirely new laser photoelectron spectrometer.

Sintec Optronics is OXIDE's appointed distributor.



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, 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 highly reliable with industrial quality while it is intended for research applications.

Applications

- Photoelectron spectroscopy
 - ARPES (Angle-Resolved Photoemission Spectroscopy): Excitation light source of angular resolution electron spectrometer
 - TOF: Excitation light source for photoelectron spectrometer

Model	PEV-H	PEV-L
Photon Energy	11eV ^{*1}	11eV ^{*1}
Energy Resolution	≤0.6 meV	≤0.6 meV
Repetition Rate	50MHz	5MHz ^{*1}
Output Power ^{*3}	≥5uW	≥3uW
Pulse Bandwidth	≤30ps	≤30ps
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 0.5MHz – 5MHz available

^{*3} Initial output power