



Keys to your expectation in Optics

# UV-KUB 3

## UV LED based compact mask aligner system

- ▶ Very compact and practical system
- ▶ Perfectly monochromatic at 365nm
- ▶ Hard and soft contact until 4 inches wafer
- ▶ Compatible with all photoresists
- ▶ Resolution :  $2\mu\text{m}$
- ▶ Alignment resolution :  $< 3\mu\text{m}$
- ▶ Piloted by PAD



# UV-KUB 3

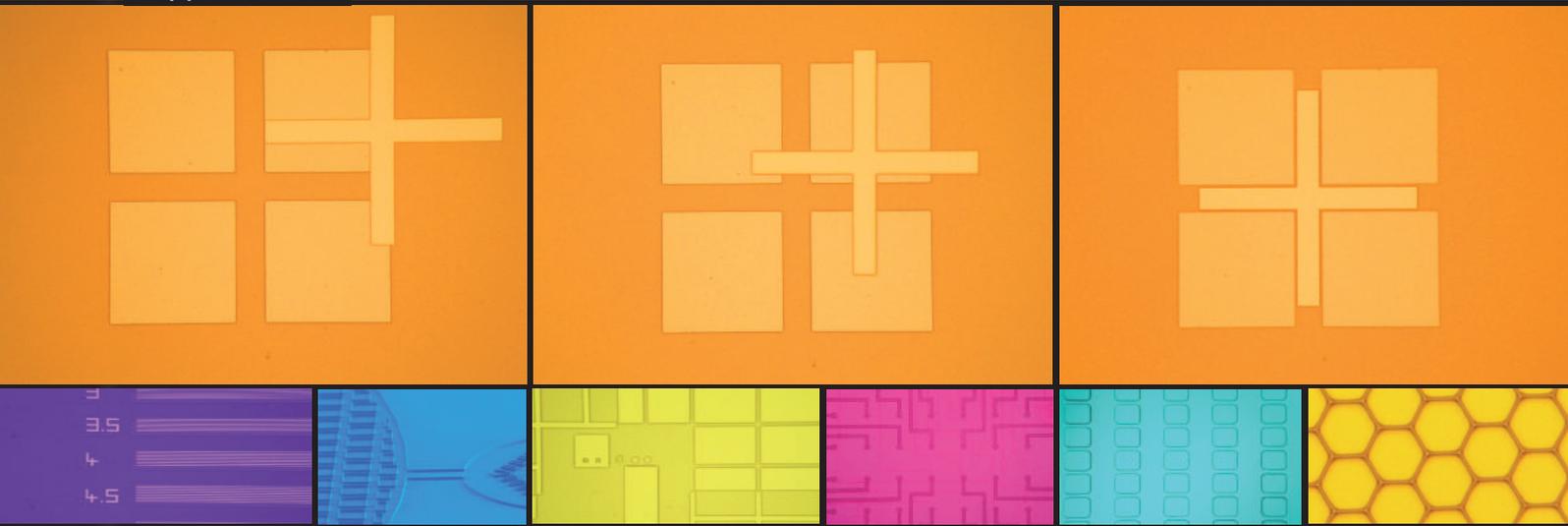
UV-KUB 3 is a UV-LED based on mask aligner system with available light sources at 365nm. This is a very compact table-top system compatible with 4 inches wafers and 100x100 mm<sup>2</sup> working surface. The minimum achievable feature size is 2 µm thanks to a specific optical arrangement offering a collimated light beam with a maximum divergence angle less than 2°. UV-KUB 3 system is compatible with both hard (physical) or soft (proximity) masking contact modes, and offers access to alignment resolutions down to 3 µm. This mask aligner system supports all standard photoresists such as AZ, Shipley, SU-8 and K-CL.

## Features

- A perfectly monochromatic exposure over the wafer surface area, with a bandwidth lower than 10 nm.
- Video assisted positioning system piloted by PAD.
- Cold UV exposure and real time in-situ temperature control of the substrate environment providing homogenous exposure over the whole surface, therefore eliminating any undesirable thermal effects.
- A strong power density.
- Long LED lifetime : more than 10 000 hours of controlled real time use.
- User-friendly touch screen interface for exposure cycles programming (continuous or cyclic exposure).
- No warm-up time required.
- Computerized control of UV source intensity adjustment is intuitive and straightforward.
- UV exposure chamber is totally hermetic : garantees user safety.
- Automated wafer loading and unloading system.
- Low consumption.



## Applications



## Performances

The UV-KUB 3 system is ideal for a wide range of applications in laboratories and R&D groups dealing with optics, biotechnology, microelectronics, photolithographic processes requiring multilevel masking, wafer bonding, simple layer or adhesive curing, connections, assemblies and biological or cells cultures.

Critical dimension- Minimum feature size	2 µm
Alignment resolution	< 3 µm
Emission spectrum (configurations available)	365 nm
Power density	30 mW / cm <sup>2</sup> ± 10 %
Maximum temperature variation into the chamber	< 1°C
Curing duration cycles (continuous/discontinuous)	From 1 second to 18 hours
Curing parameters- Maximum capacity	Unlimited
External dimensions	480 x 480 x 480 mm <sup>2</sup>
Total weight	55 kg
Touch screen control panel	15.6 " diagonal, color
Power supply	110V/ 60Hz or 230V/50Hz
Maximum power consumption	180 Watts