



Bidirectional repeatability
 $\pm 0.4 \mu\text{m}$ and ± 0.25 arcsec



Position accuracy
 $\pm 1 \mu\text{m}$



Dynamics
 Acceleration 2 g and speed 2 m/s

CHARON2HD

Stacked system/platform

 For semiconductor applications

HD stands for high dynamics. With CHARON2HD, dynamics of the existing base product are doubled without compromise on performance.

As for the CHARON2 family, the HD versions come in a multitude of different predefined configuration ranging from single X axis to complete 6 degree-of-freedom (DOF) motion system. The choice from our standard electronics makes the CHARON2HD system scalable in performance to best meet the targeted specifications.

Compared to CHARON2, the HD versions allows to double both speed and acceleration to reach dynamics of 2 m/s and 2 g acceleration.

Thanks to the standard mounting interface, this CHARON2HD can be considered as a drop-in upgrade to boost the throughput of CHARON2 application without any compromise on performance.

NANOMETER POSITION STABILITY

Ensures precise positioning accuracy over extended periods.

ISO2 CLEAN ROOM COMPATIBILITY

Suitable for controlled environments with stringent cleanliness requirements.

COARSE Z FUNCTION WITH THE Z3TM+ COMBINED MODULE

When combined with our Z3TM+ module, a 12 mm electric lifting mechanism can be used to handle wafer for loading and offloading.

MICRON LEVEL ACCURACY OVER THE FULL WAFER THANKS TO TIP-TILT AND Z CORRECTION WITH THE Z3TM+ COMBINED MODULE

The combination of CHARON2HD and the XYZ3TM+ module enables 6-DOF control at the tool point. When paired with ETEL electronics, static mechanical and stack-up errors are compensated, keeping the substrate within $\pm 1 \mu\text{m}$ across the full area and enabling faster focus and higher throughput in wafer inspection systems.

BUILT-IN VACUUM SUPPLY AT CHUCK LEVEL

When used with our modules, Facilitates efficient operation by ensuring proper material handling.

- > **Standard strokes of 365 x 355 mm and 475 x 410 mm**
- > **Compact footprint and design suitable for space-limited applications**
- > **Up to 6 degrees of freedom**

- > **Up to 30 kg payload**
- > **Built-in vacuum supply and customer signal cables at chuck level**