

## SmarAct Inc.

With the development and production of market-leading solutions in the field of high-precision positioning, micro-automation and metrology, SmarAct reliably accompanies their customers in achieving their goals. SmarAct's product portfolio ranges from single stages to complex parallel kinematics, miniature robots, control systems and measurement technology. SmarAct anticipates challenges with maximum adaptability and complete in-house production.

Since its founding in 2005, SmarAct has steadily grown from a small team of engineers to a company with more than 180 highly skilled employees. Today, SmarAct draws on years of experience and, above all, on a very passionate team with unconditional customer focus.

### LINEAR AND ROTATIONAL POSITIONERS FOR UHV, HV AND CRYOGENIC ENVIRONMENTS

SmarAct offers stick-slip piezo actuators with low-heat profiles and ultra-high vacuum compatibility which allow sample manipulation down to the mK range. The stages are based on SmarAct's piezo drive technology which is optimized for cryogenic temperatures. In addition, they can be used at temperatures of up to 330 K and are bakeable at high temperatures of up to + 150 °C. Specifically for quantum technologies, SmarAct has developed closed-loop cryogenic stages with unmatched positioning performance at temperatures down to the mK range.

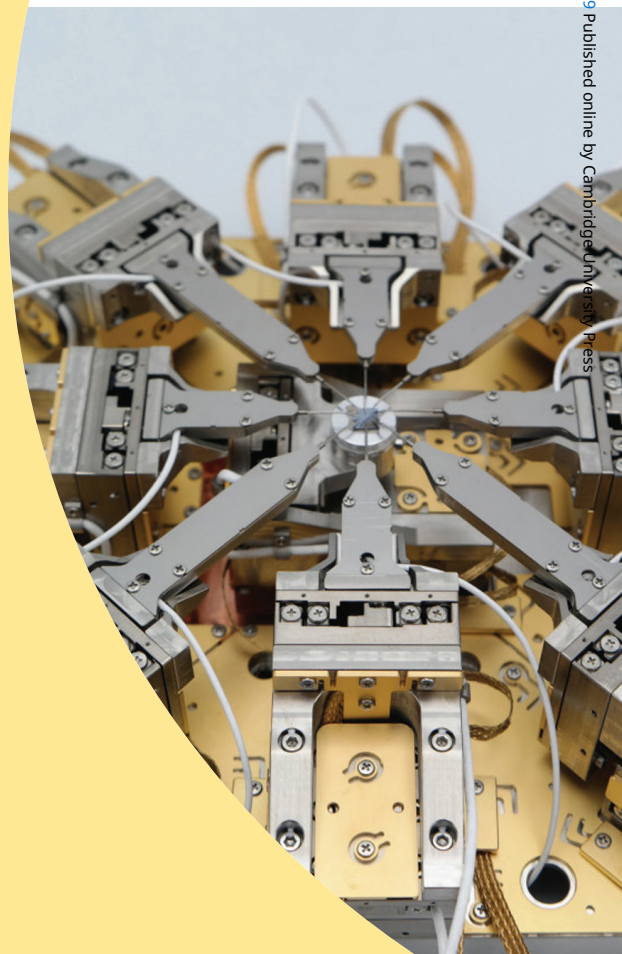
### SMARPODs

The hexapod-like SMARPOD is considerably more compact than common serial kinematics. It has many advantages such as higher rigidity, low moving mass hence improved dynamical response and a user-definable virtual pivot point. Due to the modular design of the SMARPOD, its size and strength can be adapted to changing requirements, reaching from a few centimeters to almost a meter of travel with nanometer resolution.

### SMARPROBE

SmarAct's SMARPROBE is an electrical probing system utilizing SmarAct's high precision drives on a probing area of 25 × 25 mm. SMARPROBE offers fast closed-loop positioning of probe tips to points-of-interest with minimal electron beam exposure. Active temperature control enables low thermal drift of the probes. The Safe-Approach feature helps prevent damage from your samples and probe tips and SmarAct's new hybrid drives provide vibration-free scan ranges of up to 10 μm. An optional current amplifier enables SMARPROBE to perform Electron Beam Absorbed Current (EBAC) tests. The system is fully configurable with up to 8 probe towers and can be controlled by joystick and "Point & Click" using the dedicated SmarAct software.

Are you looking for professional solutions in the field of high-precision positioning, powerful interferometric metrology or failure analysis? We are always happy to hear from you.



### How to find us

**SmarAct Inc.**  
2140 Shattuck Ave., Ste. 302  
Berkeley, CA 94704  
Tel: 415-766-9006  
Email: info-us@smaract.com  
www.smaract.com

**SmarAct GmbH**  
Schuette-Lanz-Strasse 9  
26135 Oldenburg  
Germany  
T: +49 441-800 87 90  
Fax: +49 441-800 87 921  
Email: info-de@smaract.com  
www.smaract.com