omega.3 haptic device
force feedback interface

The omega.3 relies on a unique kinematic design that has been optimized for high-end force feedback. Its high mechanical stiffness, combined with its embedded fast USB 2.0 controller, enables the rendering of crisp contact forces. Conceived and manufactured in Switzerland, the omega.3 is specifically designed for demanding applications where performance and reliability are critical.

applications

The omega.3 provides 3D active force feedback and is used in a wide range of applications, including:

› medical and space robotics
› micro and nano manipulators
› teleoperation consoles
› virtual simulations
› training systems
› research
omega.3 workspace translation  160 x 110 mm forces translation  12.0 N resolution translation  < 0.01 mm stiffness closed-loop  14.5 N/mm electronics interface standard USB 2.0 refresh rate up to 4 KHz power universal 110V - 240V software platforms Microsoft Windows Linux all distributions Apple macOS Blackberry QNX WindRiver VxWorks software haptic SDK robotic SDK features structure delta-based parallel kinematics calibration active gravity compensation automatic driftless user input 1 programmable button safety velocity monitoring electromagnetic damping option right- or left-handed