

Desktop 6D™

The Desktop 6D is a compact 6 active degrees-of-freedom haptic device.

Its workspace and small footprint address it to an individual use, in front of a desktop screen, a head-mounted display (HMD) or inside a simulator

Research

Engineering

Virtual Reality

Medical Simulation & Teleoperation

6 ACTIVE DEGREES-OF-FREEDOM WITH FORCE FEEDBACK AND HIGH RESOLUTION MEASUREMENTS

- ✔ Passive weight balancing
- ✓ Ethernet/UDP communication system
- ✔ Removable end-effector, on request.
- ✓ Software interface:
 - ✓ Drivers (binary and/or source code) available for: Python™ for IPSI™, ROS™, ROS2™, CHAI3D™, ODE™, Matlab Simulink™, LabVIEW™
 - ✓ Dedicated plug-ins for: 3DExperienceTM, CatiaTM & DelmiaTM V5, SolidworksTM
 - Solutions for Unity, UnReal, and other real-time interactive simulation platforms by our Partners: LS Group, Tree-C, TOIA Ltd, ...

MODULARITY

On the end-effector, an analog pinch finger clamp provides a signal 0-100%, is acting as a 7th DOF. A user button close mounted on the device, permit for instance to be used a shift feature to extend the workspace.

A small independent user button box, connected to the control unit, provides three user push-buttons, and one finger detection surface that can deactivate the force feedback when released.

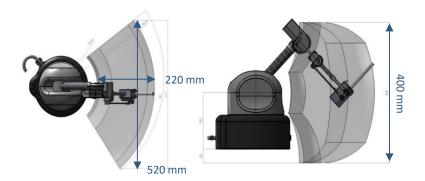


User buttons status are provided to the software interface. The end effector orientation can be modified.

The device can also be configured in up-side-down position.

We are available to discuss with you any customized needs you have.





TECHNICAL

Translation workspace 520 x 220 x 400 mm

Rotation Workspace 260° x 95° x 240°

Payload (center of the workspace): 10 N (peak)/ 3 N (continuous)

Rotation force: Peak, Continuous 0.8 Nm, 0.2 Nm
Position resolution 0.023 mm
Rotation resolution 0.0023 °
Device weight 4.6 kg

ELECTRICAL

Power supply 100-240 VAC 50/60Hz single phase Consumption Less than 200W

SOFTWARE

Maximum translation stiffness 1000 N/m
Maximum rotation stiffness 4 Nm/rad
Update Rate 1000 Hz

Information in this document is subject to change without notice.