

VIRTUOSE 3D RVTM

The Virtuose 3D RV is a 6 degrees-of-freedom haptic device with 3 active translations, specifically designed to interact in Virtual Reality environments. Thanks to its large workspace and high forces, it enables a scale one interaction with digital mock-up from the CAD.

Virtual Reality# Industrial teleoperation# Medical Teleoperation# Medical training & simulation

3 ACTIVE TRANSLATIONS – **3** PASSIVE ROTATIONS

- ✓ Passive weight balancing
- Ethernet/UDP communication system
- ✔ Removable handle, equipped with programmable buttons and a presence sensor
- ✓ Software interface:
 - ✔ Dedicated plug-ins for: 3DExperienceTM, CatiaTM & DelmiaTM V5, SolidworksTM
 - ✓ Drivers (binary and/or source code) available for: Python[™] for IPSI [™], ROS[™], ROS[™], CHAI3D[™], ODE[™], Matlab Simulink[™], LabVIEW[™]
 - ✓ By Partner: Unity3DTM by LS Group, TOIATM by Generic Robotics



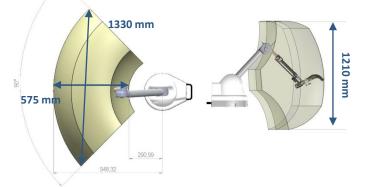
MODULARITY

The user takes hold of the haptic device using a gripper or handle placed at the tip (called "end-effector"). The end-effector is easy to remove and replace, so that a frequent change of tool is possible, in order to customize the application and reinforce the sensation of immersion.

The gripping tool is equipped with three push-buttons.

One of the push-buttons is dedicated to the offset function, while the state of the other buttons can be accessed using the VIRTUOSE API.





TECHNICAL

Translation workspace	1330 x 575 x 1020 mm
Rotation Workspace	330° x 120° x 270°
Payload (center of the workspace):	35 N (peak)/ 10 N (continuous)
Position resolution	0.016 mm
Rotation resolution	0.35 °
Device Weight	12 kg
ELECTRICAL	
Power supply	100-240 VAC 50/60Hz single phase
Consumption	Average consumption 200W
	Max consumption: 540W
Software	
Maximum translation stiffness	2000 N/m
Update Rate	1000 Hz

The Virtuose 6D RV, Virtuose 6D TAO and Virtuose 3D RV are also available upside-down. We are available to discuss with you any specific request for integration.

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