

# 3Shape R700 3D Scanner for Orthodontics

Fast and reliable 3D scanning for storage and analysis of orthodontic models

3Shape's R700 is a state-of-the-art 3D scanner specifically developed to scan dental stone models in proper occlusion. Unique features of the R700 scanner guarantee reliable superior scan results without compromising ease of use.

**Easy positioning** - of the models in the scanner and one-button scanning.

**High and consistent accuracy** - 20 microns. Continuous validation with Mitutoyo™ ceramic metrology gauge blocks (surface to surface accuracy of 15 microns).

**Advanced calibration** - of the laser, cameras and axes (can easily be performed by the user).

**2 cameras** - to ensure a better coverage and control the quality of the scanned data.

**3 mechanical axes** - 360 degree rotation, translation and tilt (secondary rotation axis) ensure optimal exposure of the geometry to the cameras and laser (including undercuts).

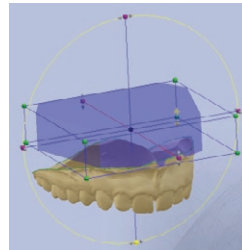
**Automatic alignment** - of scanned upper and lower models in original occlusion.

High resolution scanned model available after **2 minutes** - automatic creation of surfaced 3D models (triangulation) ready to use for analysis and treatment planning.

**3D base creation** - scan stone models without base and create a virtual base for consistent model setup and analysis.



The R700 3D Scanner.



## TECHNICAL SPECIFICATIONS

- |                                 |   |
|---------------------------------|---|
| • <b>Scan time (Ready STL)</b>  | Full model: 60 sec (75 sec)                 |
| • <b>Accuracy</b>               | < 20 microns, on 14-unit bridges            |
| • <b>Dual image capture</b>     | 2 x cameras, 1 x laser                      |
| • <b>Motion system</b>          | 3-axis: rotation, linear motion and tilting |
| • <b>Interface</b>              | USB connection to PC and laptop             |
| • <b>Output formats</b>         | STL (open standard) and DCM                 |
| • <b>Material color</b>         | Material color independent                  |
| • <b>Regulatory conformity</b>  | CE, RoHS, FCC, FDA registered, WEEE         |
| • <b>Dimensions (W x H x D)</b> | 34 x 29 x 33cm (14" x 11" x 13")            |
| • <b>Weight</b>                 | 14 kg                                       |