

Scantech 3DeVOK MT



Shining 3D EinScan HX



Creality CR-Scan Raptor Pro

| Light source(s) | 34 Blue Laser Lines, 22 Infrared Laser Lines Infrared VCSEL Structured Light | Blue LED, 7 Blue Laser Crosses | 7 Parallel Blue Laser Lines 22 Crossed Blue Laser Lines NIR Structured Light 12 Circular LED Lights |
|---|--|--|--|
| Basic accuracy | Up to 0.04 mm | Up to 0.04 mm | 0.02 mm (Blue Laser Mode) |
| Volumetric accuracy | Up to 0.04 mm + 0.06 mm/m | Up to 0.04 + 0.06 mm/m | 0.02 mm + 0.06 mm/m or 0.02 mm + 0.08 mm/m |
| Min. point distance/resolution | 0.05 – 5 mm, (Blue Laser), 0.1 – 5 mm (IR Laser/VCSEL), Up to 0.05 mm resolution | 0.05 mm (min. point distance), 0.25~3 mm (point distance) | 0.02 – 2 mm |
| Max scanning rate (points/s) | Up to 4.5 M points/s | Up to 1.2 M points/s | Up to 600,000 points/s |
| Max field of view (FoV) | Up to 3 ft 7 in × 3 ft 3 in | 1 ft 4.5 in × 1 ft 5 in | Approx. 1 ft 1 in x 1 ft 11 in |
| Scanning distance | 5.9 – 4 ft 11 in | 1 ft 6.5 in | 5.9 – 39.4 in |
| Weight | 1.41 lbs | 1.56 lbs | 0.82 lbs |
| Marker-free scanning | Yes Across all three light source modes | Yes Rapid scan mode for texture, but laser mode may require markers for alignment | Yes Speckle matching, but user feedback suggests markers often needed for laser |
| Outdoor/direct sunlight capability | Yes | Limited/no | Yes (but limited up to 100,000 lux) |
| Black/reflective surface scanning (without spray) | Yes | Yes (laser scan mode only) | Yes |
| Full color capture | Yes | Yes | Yes |
| Bundled software (Key examples) | 3DeVOK Studio (included), compatible with Geomagic Design X, Artec Studio, PowerShape, PowerMILL | EXScan Pro (included), often bundled with Solid Edge Shining 3D Edition, Geomagic Essentials | CrealityScan (included) compatible with Geomagic Control X, Verisurf Inspect |



Scantech 3DeVOK MQ



Revopoint MIRACO



Creality Raptor Pro

| Light source(s) | 22 Infrared Laser Lines, Infrared VCSEL Structured Light (Speckle) | Quad-camera Infrared Structured Light | 22 Cross Blue Laser Lines 7 Parallel Blue Laser Lines NIR Structured Light |
|------------------------------|--|--|--|
| Basic accuracy | Up to 0.08 mm | Up to 0.04 mm | Laser: up to 0.02 mm IR: up to 0.10 mm |
| Volumetric accuracy | Up to 0.04 mm + 0.06 mm/m | 0.02 mm + 0.05 mm | 0.02 mm + 0.08 mm/m |
| Resolution | Up to 0.1 mm | Up to 0.05 mm fused point distance | Laser line thickness: 0.1 mm (7 lines) |
| Max scanning rate (points/s) | Up to 4.5 M points/s | N/A | Up to 660,000 Points/s (Laser) |
| Scanning frame rate (FPS) | Up to 70 FPS Marker alignment | Up to 20 FPS practical 11-15 FPS | Up to 60 FPS (Laser) Up to 30 FPS (NIR) |
| Object size range | 5.5 in ×5.5 in - 1 ft 7 in x 1 ft 7 in 1.97 in to 3 ft 7 in × 3 ft 3 in (FoV) | 0.39 x 0.39 x 0.39 in 13 ft 1 in x 13 ft 1 in x 13 ft 1 in | 5 mm to 13 ft |
| Weight | 1.21 - 1.37 lbs | 1.65 lbs | 0.89 lbs |
| Marker-free scanning | Yes Infrared laser & speckle | Yes Feature tracking PMK relies on markers for metrology | Yes 3D spot matching imaging |
| Color scanning | Yes | Yes | Yes |
| Full color capture | Yes | Yes | Yes |