

Ultra-compact Polygon Scanners for High-speed Laser Scanning



Precision Laser Scanning, based in Scottsdale, Arizona, USA, has announced its Gecko series of ultra-compact polygon scanners. Geckos have the motor polygon assembly mounted directly to the control board and the size of the control board has been drastically reduced with application-specific ICs. High efficiency allows use without a bulky heat sink. A complete motor polygon assembly with controller can be made with a footprint smaller than a credit card.

Faster and more powerful lasers require faster scan rates. Polygon scanners are 10 to 100 times faster than galvanometer scanners. However, polygon scanners, with their controllers, can be very bulky making it difficult to implement high-speed laser scanning technology into small spaces.

Microscopy and biomedical applications have always had size constraints. As UAVs get smaller, polygon scanners used for Lidar must be reduced in size, weight and power consumption. Autonomous vehicles including self-driving cars may use compact polygon scanners for collision avoidance. The small size and low mass of a Gecko polygon scanner is optimum on the end of a rapidly moving robotic arm. ULTRAFAST lasers require polygon speed to fully utilize MHz pulse rates in material processing.

Gecko polygon scanners are available in custom sizes and speeds with any number of facets to meet OEM requirements for high-speed laser scanning.

For more information [visit the website of Precision Laser Scanning](https://www.precisionlaser.com/)