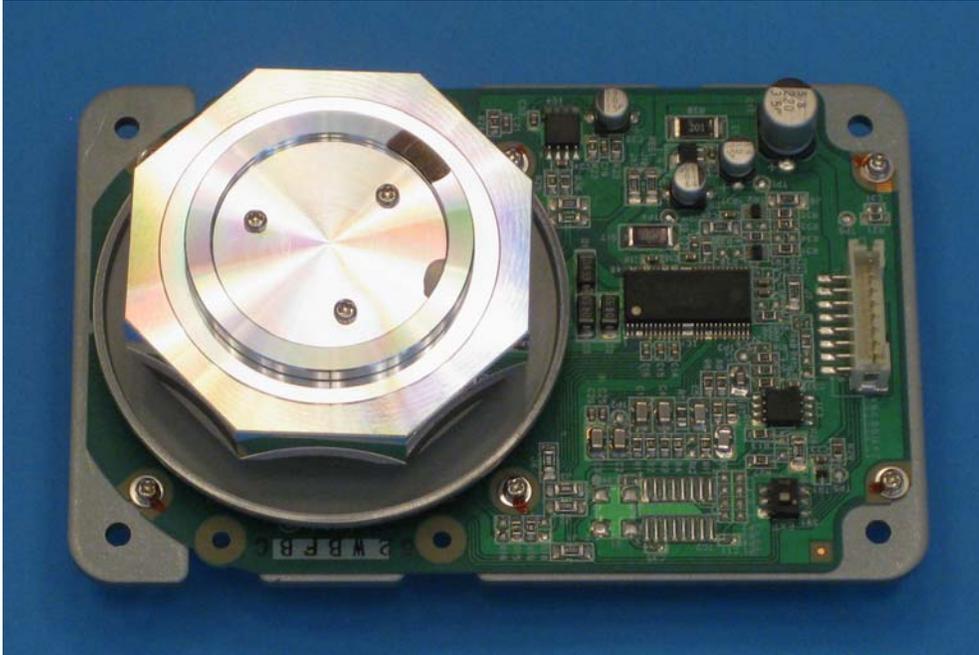


GECKO™ Off-The-Shelf scanner – 8.5 mm aperture



Gecko-5-OTS up to 5,000 RPM

The Gecko series of polygon scanners are very compact and efficient by way of integrating the high accuracy polygon on a precision scanning motor directly to a miniaturized controller.

Gecko-5-OTS is an Off-The-Shelf model. Quick delivery and low price makes it popular for proof of concept projects as well as some OEM applications. The Gecko-5-OTS is suitable for beams as large as 8.5 mm on the eight facets. Its top speed is 5000 RPM. (If higher speed is needed and a smaller aperture is acceptable, consider the **Gecko-33-OTS** model. The aperture is 4.5 mm with a top speed of 33,000 RPM.)

Custom Gecko facet counts, facet sizes and speeds > 55,000 RPM are available on request. Gecko polygon scanners are ideal for high volume OEM applications requiring compact size, high efficiency and low cost.

Need polygon speed but not familiar with how to implement polygon scanning technology? See the Laser Scanning News section of our website for educational information.

<http://precisionlaserscanning.com/laser-scanning-news/>

Feel free to contact us with questions.

GECKO™ 5-OTS SPECS

Facets: 8
Inscribed Diameter: 55 mm
Mirror thickness: 10 mm
Facet clear aperture: 20 x 8.5 mm
Coating: Protected Aluminum
Speed: 1,000 – 5,000 RPM
Scan Rate: 133 to 667 Hz
Scan angle up to \approx 50 degrees (depending on spot size and beam feed angle)
Speed control: TTL Ext freq reference
Rotation: CW as viewed from polygon side
Facet Flatness: $\lambda/4$ @ 633nm per inch
Surface Roughness: $< 50\text{\AA}$ RMS
Surface quality: 60/40

Dynamic track: < 60 arc sec
Facet-Facet: < 30 arc sec
Jitter: $< 0.03\%$
Speed stability: $< 0.03\%$
Bearing: Ball bearing
Operating attitude: Shaft vertical, mirror up
Supply Voltage: 24 VDC $\pm 10\%$
Max Current: 2.0A Start (1.0A Run)
Time to speed: < 30 sec
Controller Power-I/O cable: 500 mm
Start/Stop control: TTL
Speed sync signal: TTL open collector
Ship/Storage: -20C to $+60\text{C}$ 10-90% RH
Operating: 15C to 40C , 15-85% RH

OPTIONAL START OF SCAN DETECTION



An SOS detector is required to achieve accurate line to line registration with any polygon scanner. It is used to synchronize a CW or pulsed laser to the scanner. (Galvo scanners need absolute encoders, polygon scanners need Start-Of-Scan detection.) Read more about it here:

<http://precisionlaserscanning.com/start-of-scan-sos-detection-for-polygon-scan-heads/>

The PRECISION SOS DETECTOR™ is the first commercially available Start-Of-Scan detector made for the challenging environment inside a high power Polygon Scan Head. It operates equally as well in low powered imaging systems. It is designed to work with the PRECISION SOS LASER DIODE MODULE™

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Specifications subject to change without notice.
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