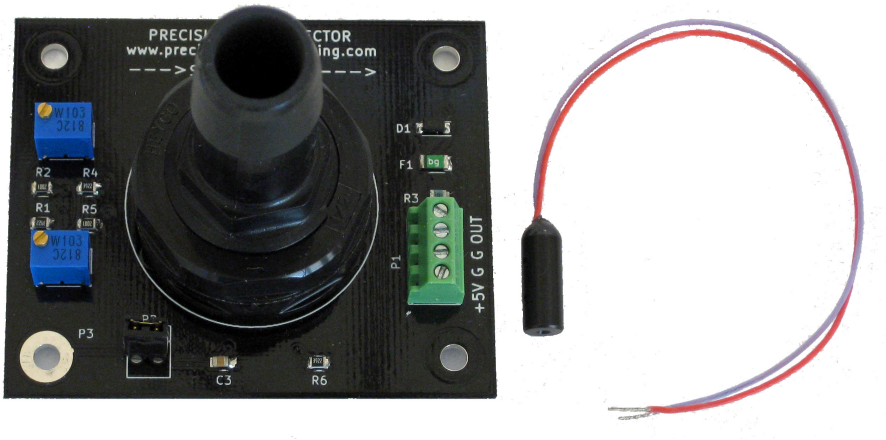
PRECISION LASER SCANNING

SOS Detection Kit

For any polygon scanning application including high power Polygon Scan Heads



Galvanometer scanners need encoders for accuracy. Polygon scanners require Start-Of-Scan detection for accuracy. This SOS kit is plug and play. It will give the most accurate results from any polygon scanner. It zeros out facet to facet error. (Don't use an encoder on a polygon scanner. An encoder introduces runout error and cannot accurately tell you where the scan starts or where the beam is pointing!)

The **Precision SOS detector™** uses a bi-cell detector to negate position drift due to temperature change. It includes effective stray light baffling to avoid interference from the working beam. It has adjustable sensitivity to adapt to any requirement.

Precision mini-SOS Laser Diode Module™ is a very compact source. The red laser is eye safe for convenient alignment. The kit is a matched set for the OEM to easily implement accurate polygon scanning. No need for manual focusing!

Precision Laser Scanning engineers have over 50 years of combined experience implementing polygon scanners in high speed polygon scanning applications. We can help with other enabling electronics as well as useful tips and tricks to speed your implementation into an efficient polygon scanning system.

See more information on SOS detection here:
https://precisionlaserscanning.com/start-of-scan-sos-detection-for-polygon-scan-heads/

Please feel free to ask questions. We are always happy to help:
info@precisionlaserscanning.com

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SPECIFICATIONS

Precision SOS Detector™

OVERALL SIZE
PCB 2.30” x 1.90”
Height 2.0” typical
(Baffle tube may be taller/shorter as needed)

ELECTRICAL
Input 5 VDC +/- 5% @ 100 mA
Jumper on PCB to isolate ground
Output drive TTL @ 5 mA
Falling SOS trigger transition time <7 ns
I/O terminals accept up to 20 gauge wire
(COAX recommended for output pulse)
Potentiometers may be adjusted, if necessary, to accurately trigger at lower laser power.

OPERATING
-25C to +80C non-condensing
Humidity 20 to 85% non-condensing

Precision mini-SOS Laser Diode Module™

SIZE
5 mm diameter
12 mm length (plus potting and wires)

OPTICAL
Wavelength 650 nm
<1 mW Class 2
No need for focusing. Plug-n-Play with PLS SOS detectors!

POWER
5 VDC +/- 5% Power leads 100 mm length

OPERATING
Temperature -40C to +80C
Humidity 20 to 85% non-condensing

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Specifications subject to change without notice.
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