

Position Sensing Modules

For Non-Contact Measurement Of:
Position, Motion, Distance And Vibration



Features

- Fully Packaged Position Sensing Detectors
- Silicon Linear: 400-1100 nm
- Silicon Duolateral: 400-1100 nm
- Silicon Quadrant: 400-1100 nm
- Germanium Tetra-Lateral: 800-1800 nm
- Removable Filter Holder Adapter
- Standard Mounting Holes
- Plug and Play Compatibility with all ON-TRAK Position Sensing Amplifiers

PSM Series Position Sensing Modules. Plug-And-Play Precision.

On-Trak Position Sensing Modules are fully packaged position sensing detectors that, when used with an On-Trak position sensing amplifier, provide an analog output directly proportional to the position of a light spot on the detector active area.

Yet, what truly sets them apart is their proprietary, plug-and-play design. Never has position sensing been so convenient... or accurate.

Finally, A Plug-And-Play Solution.

No more hassling with breadboards, soldering, cutting and wiring. Instead, all On-Trak Position Sensing Modules (PSMs) incorporate a subminiature 9-pin connector that plugs directly into any On-Trak Position Sensing Amplifier.

Just plug it in and go. It's that simple.

1. OT-301 Versatile Position Sensing Amplifier
2. OT-302 Display Module
3. PSM2-10 Position Sensing Module
4. Laptop Computer with BeamTrak software



Single, Duolateral, Quadrant.

Select from several distinct configurations; each module contains a linear, duolateral, tetralateral, or quadrant position sensing detector. All modules are conveniently packaged to allow simultaneous monitoring of position and light intensity. Position Sensing Modules come in two package sizes: Standard and Compact. The standard measures 2.8" x 2.45" x 1.125". The compact measures 1.25" x 1.25" x 0.975".

Filters And Filter Holder Adapters.

Harsh ambient lighting conditions? No problem. Each module readily accepts a complete range of optional filters to

reduce the effect of noise caused by ambient light. Moreover, a filter holder is included with each module at no extra cost.

Standard Mounting Holes.

All PSMs feature standard mounting holes for easy mounting with your existing lab equipment. Whether your post and stands are 1/4 - 20 or 8/32, you'll be up and running in a matter of minutes.

Robust Aluminum Housings.

On-Trak Position Sensing Modules are encased in rugged aluminum housings to protect your investment.

PSM Specifications

Model	Active Area (mm)	Detector Type	Wavelength Range	Package Type	Typ. Resolution	Typ. Linearity
PSM 1-2.5	2.5 x 0.6	Linear Silicon	400-1100 nm	Compact	62.5 nm	0.1%
PSM 1-5	5.0 x 1.0	Linear Silicon	400-1100 nm	Compact	125 nm	0.1%
PSM 1-10	10.0 x 2.0	Linear Silicon	400-1100 nm	Standard	250 nm	0.1%
PSM 1-20	20.0 x 3.0	Linear Silicon	400-1100 nm	Standard	500 nm	0.1%
PSM 1-30	30.0 x 4.0	Linear Silicon	400-1100 nm	Standard	750 nm	0.1%
PSM 2-2	2.0 x 2.0	Duolateral Silicon	400-1100 nm	Compact	50 nm	0.3%
PSM 2-4	4.0 x 4.0	Duolateral Silicon	400-1100 nm	Compact	100 nm	0.3%
PSM 2-4Q	4.0 x 4.0	Quadrant Silicon	400-1100 nm	Compact	100 nm	N/A*
PSM 2-5G	5.0 x 5.0	Pincushion Tetralateral Germanium	800-1800 nm	Compact	5 μ m	—
PSM 2-10	10.0 x 10.0	Duolateral Silicon	400-1100 nm	Standard	250 nm	0.3%
PSM 2-10Q	9.0 x 9.0	Quadrant Silicon	400-1100 nm	Standard	100 nm	N/A*
PSM 2-10G	10.0 x 10.0	Pincushion Tetralateral Germanium	800-1800 nm	Standard	5 μ m	—
PSM 2-20	20.0 x 20.0	Duolateral Silicon	400-1100 nm	Standard	500 nm	0.3%
PSM 2-45	45.0 x 45.0	Duolateral Silicon	400-1100 nm	Standard	1.25 μ m	0.3%

* For nulling applications

PSM Accessories

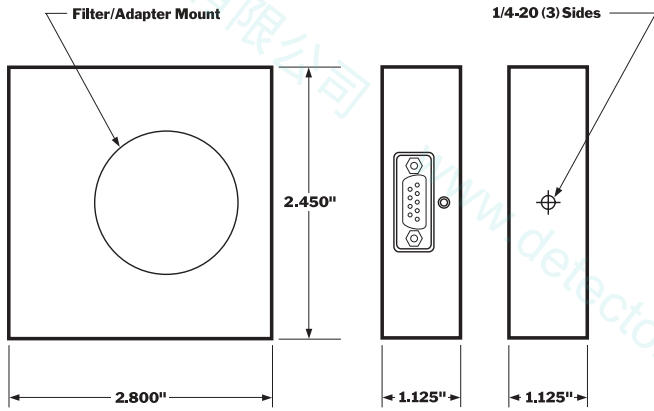


Choose from a wide range of PSM accessories.

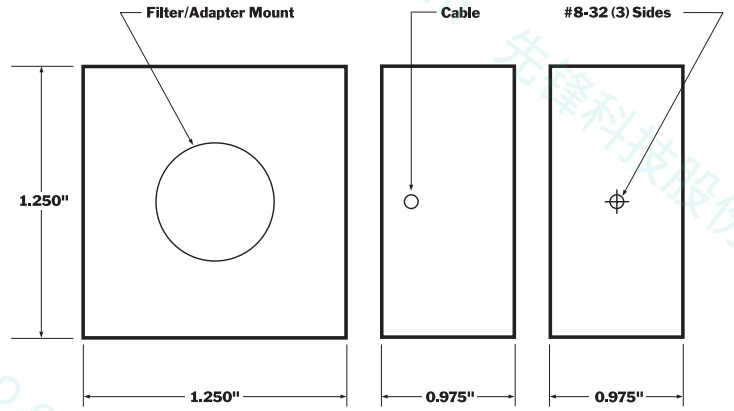
Model	Description
F12.5-632.2	12.5 mm optical filter. 632.8 nm, +2.0/-0 nm. FWHM 10 ± 2 nm. 50% transmittance
F25-632.8	25 mm optical filter. 632.8 nm, +2.0/-0 nm. FWHM 10 ± 2 nm. 50% transmittance
F12.5-635	12.5 mm optical filter. 635 nm, +5.0/-0 nm. FWHM 10 ± 2 nm. 50% transmittance
F25-635	25 mm optical filter. 635 nm, +5.0/-0 nm. FWHM 10 ± 2 nm. 50% transmittance
F12.5-670	12.5 mm optical filter. 670 nm, +3.0/-0 nm. FWHM 10 ± 2 nm. 50% transmittance
F25-670	25 mm optical filter. 670 nm, +3.0/-0 nm. FWHM 10 ± 2 nm. 50% transmittance
F12.5-HA	12.5 mm Blank Filter Holder Adapter
F25-HA	25 mm Blank Filter Holder Adapter
CA-DB9MM-5	5 foot molded cable. DB9 connector
CA-SC10FR-3	3 foot ribbon cable. 10 pin socket connector. Unterminated
PS-3	Post and Stand

Specifications

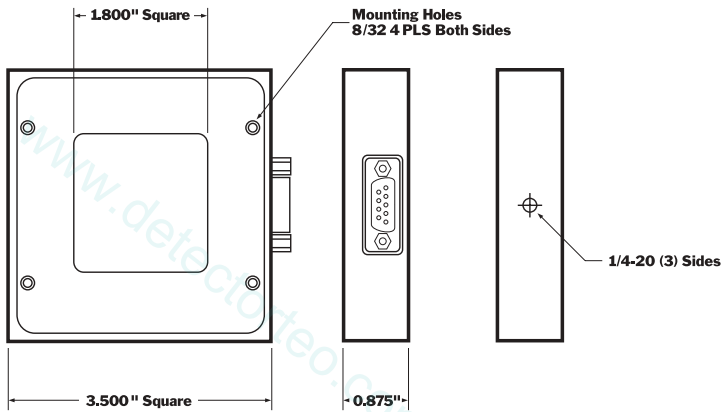
Standard Package Drawing



Compact Package Drawing



PSM2-45



See OT-301 Position Sensing Amplifier brochure for details.



See OT-302D Display Module brochure for details.