

## 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.

### 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.

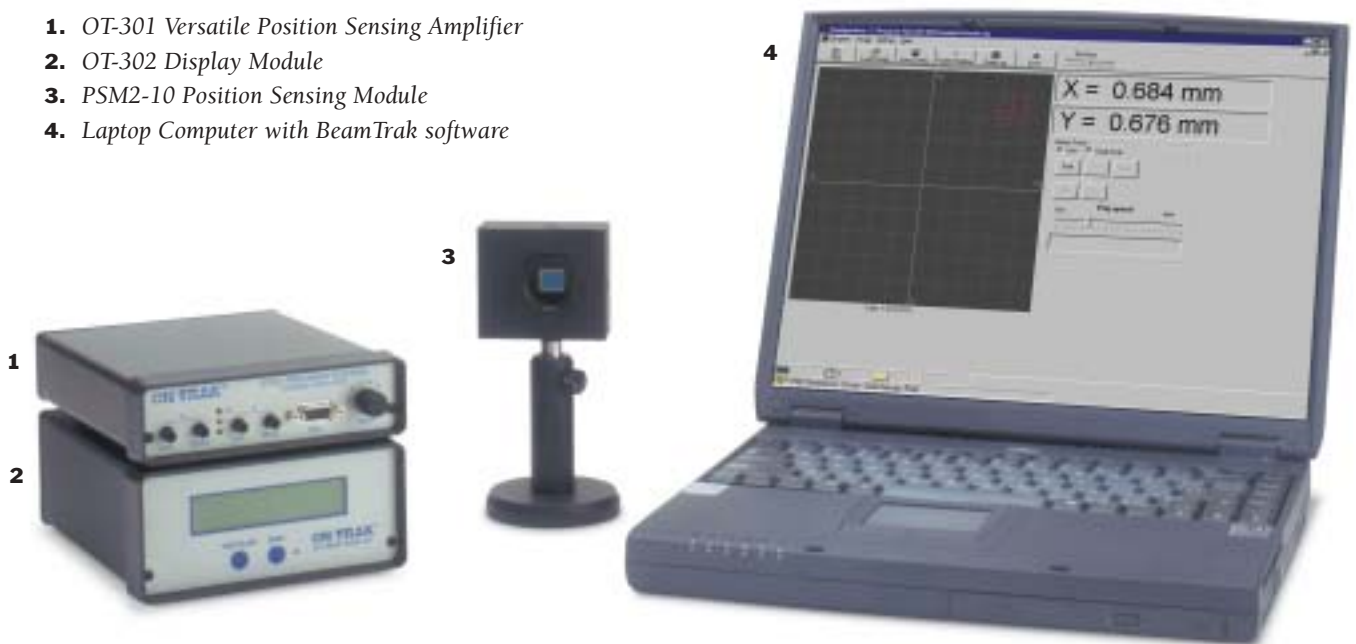
### Standard Mounting Holes.

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.

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



## 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 $\mu$ 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 $\mu$ 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 $\mu$ m	0.3%

\* For nulling applications

## PSM Accessories

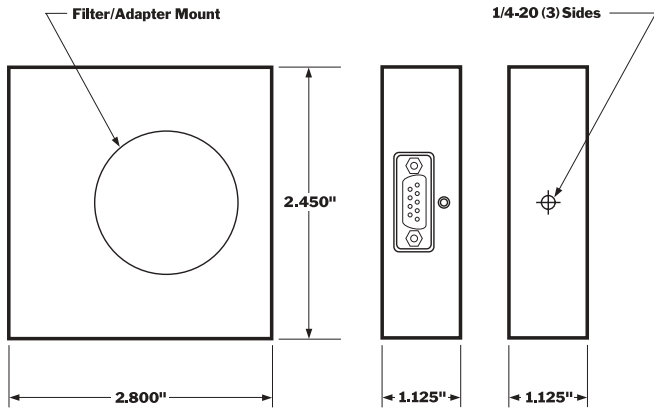


Choose from a wide range of PSM accessories.

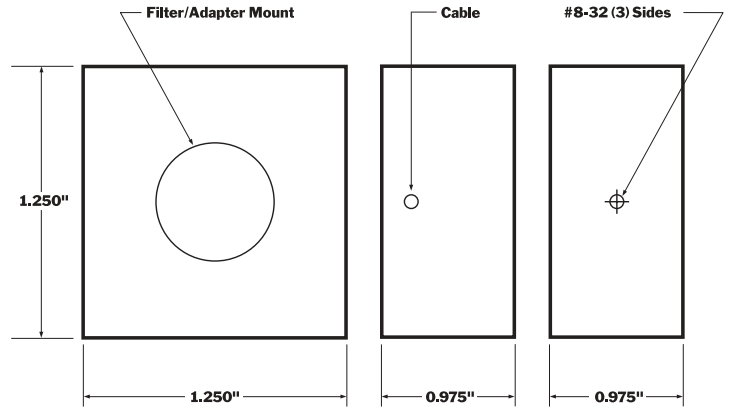
Model	Description
<b>F12.5-632.2</b>	12.5 mm optical filter. 632.8 nm, +2.0/-0 nm. FWHM $10 \pm 2$ nm. 50% transmittance
<b>F25-632.8</b>	25 mm optical filter. 632.8 nm, +2.0/-0 nm. FWHM $10 \pm 2$ nm. 50% transmittance
<b>F12.5-635</b>	12.5 mm optical filter. 635 nm, +5.0/-0 nm. FWHM $10 \pm 2$ nm.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

Specifications

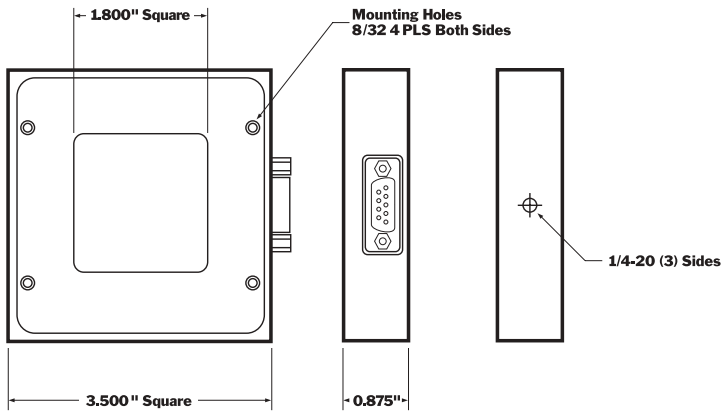
Standard Package Drawing



Compact Package Drawing



PSM2-45



See OT-301 Position Sensing Amplifier brochure for details.



See OT-302D Display Module brochure for details.