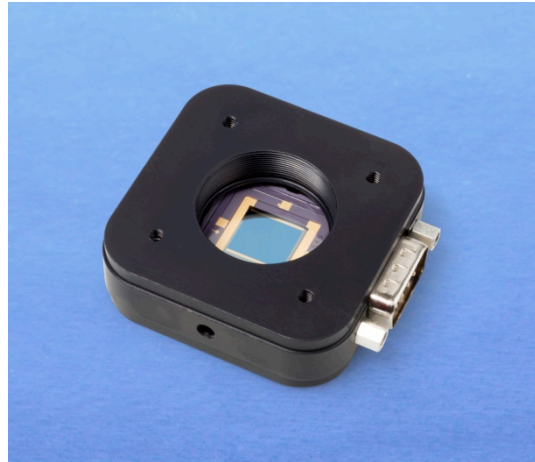


## PSD Holder MH01

The SiTek PSD Holder MH01 is a high linearity PSD assembled in a mechanical holder. The mechanical holder has a size of only 52 x 52 mm<sup>2</sup> and the PSD is easily accessed via a DSUB9 connector. It is designed to fit ø1" filters as well as standard optomechanical components, such as posts and lens tubes. To minimize reflections it has a black anodized surface.

The holder is available with SiTek's PSDs ranging from 2,5 - 20 mm (1D) and 2 x 2 – 20 x 20 mm<sup>2</sup> (2D). SiTek's UV-enhanced PSDs and PSDs with stray light elimination (NT) can be delivered mounted in the PSD mechanical holder upon request.



Picture shows PSD Holder MH01 with a 2L10 PSD (S2-0359)

### Part number & Parameters

#### PSD Holder with 1-dimensional PSDs

##### General data

Position non-linearity +/-0,1%  
Detector resistance 50 kohm

| Part Number | Description | Active area (mm) | Leakage current (nA) | Noise current (pA√Hz) | Capacitance (pF) | Rise time (10-90%) (µs) |
|-------------|-------------|------------------|----------------------|-----------------------|------------------|-------------------------|
| S1-0320     | 1L2,5_MH01  | 2,5 x 0,6        | 2                    | 0,4                   | 1,6              | 0,03                    |
| S1-0321     | 1L5_MH01    | 5 x 1            | 4                    | 0,4                   | 5                | 0,05                    |
| S1-0322     | 1L10_MH01   | 10 x 2           | 8                    | 0,4                   | 15               | 0,2                     |
| S1-0323     | 1L20_MH01   | 20 x 3           | 60                   | 0,5                   | 45               | 0,5                     |

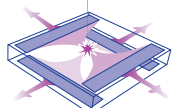
#### PSD Holder with 2-dimensional PSDs

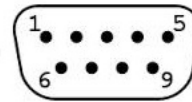
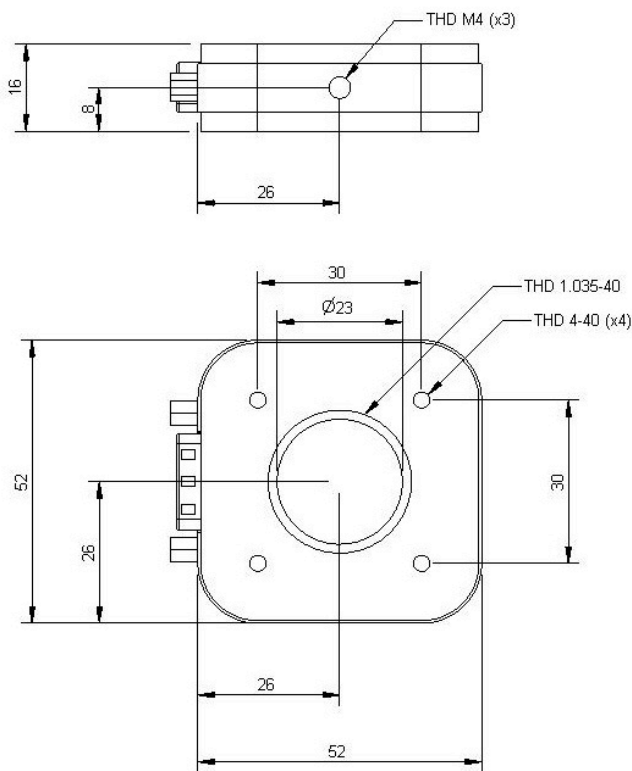
##### General data

Position non-linearity +/-0,3%  
Detector resistance 10 kohm

| Part Number | Description | Active area (mm) | Leakage current (nA) | Noise current (pA√Hz) | Capacitance (pF) | Rise time (10-90%) (µs) |
|-------------|-------------|------------------|----------------------|-----------------------|------------------|-------------------------|
| S2-0357     | 2L2_MH01    | 2 x 2            | 50                   | 1,3                   | 7                | 0,03                    |
| S2-0358     | 2L4_MH01    | 4 x 4            | 50                   | 1,3                   | 20               | 0,08                    |
| S2-0359     | 2L10_MH01   | 10 x 10          | 100                  | 1,3                   | 90               | 0,4                     |
| S2-0360     | 2L20_MH01   | 20 x 20 *        | 200                  | 1,5                   | 360              | 1,6                     |

\* Active area is limited by Ø23 mm aperture





| Pin no. | Output             |
|---------|--------------------|
| 1       | X1 (only 2D-PSD)   |
| 2       | X2 (only 2D-PSD)   |
| 3       | Y1                 |
| 4       | Y2                 |
| 5       | N.C.               |
| 6       | N.C.               |
| 7       | N.C.               |
| 8       | Bias (only 1D-PSD) |
| 9       | N.C.               |

The PSD connections are accessed via a DSUB9 connector and the holder can be connected to SiTek's Signal Processing System SEEPOS either with the supplied cable or, with minor modification, by direct plug-in.

### Optomechanical accessories suitable for SiTek PSD Holder MH01

SiTek PSD holder is designed to fit standard optical and optomechanical components like posts, filters, filter holders, lens tubes etc. Some suitable accessories, which often can be found at your local optomechanical supplier, are listed below and further information can be provided by your local distributor or SiTek Electro Optics AB.

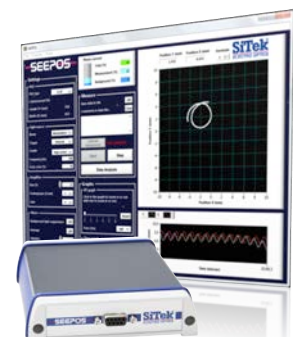
- Optical posts with M4 thread
- Ø1" or Ø25 mm mounted or unmounted optical filters without thread
- Ø1" mounted optical filters with 1035"-40 external thread
- Retaining ring 1.035"-40
- Ø1" lens tube with 1035"-40 external thread
- 30 mm cage system (rods with #4-40 thread)



### PSD Holder MH01 suits SEEPOS perfectly

For most position measurement applications the SiTek SEEPOS system offers a complete and easy-to-use solution. It is a versatile PSD signal processing tool optimized for development of PSD systems. High speed PSD electronics combined with digital signal processing and high speed USB data transfer makes it possible to build your own powerful measurement system. All parameters, such as PSD bias voltage, amplifier gain, the use of analog and digital filters etc., are easily controlled from the software and light spot position is continuously displayed both in XY and X-t, Y-t graphs.

For further information contact your local distributor or SiTek Electro Optics AB.



Information in this data sheet is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omissions. Specifications are subjected to changes without notice.