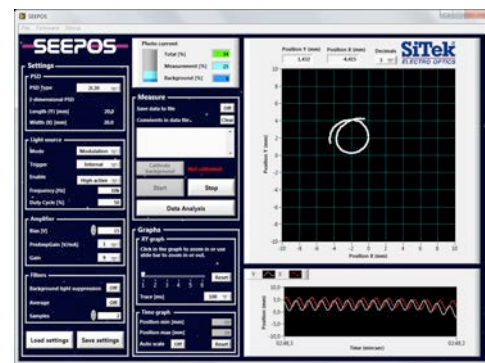# PSD Signal Processing System

Part number: SE-0018
Description: SEEPOS

The SiTek SEEPOS 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 gives a powerful measurement system. With its large dynamic range it can handle light powers from nW to mW from DC light sources as well as modulated light sources.

All parameters, such as PSD bias voltage, amplifier gain, the use of analog and digital filters etc., are easily controlled from the included software and light spot position is continuously displayed both in XY and X-t, Y-t graphs. Optimized plot algorithms ensure that all data is visually seen on the screen even in full speed measurements. Included tools for data analysis and visualization simplify rapid scan through large data sets in order to find specific parts of interest.

Technical Specification
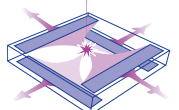
Parameters

Analog Part

Input photo current range	50 nA – 5 mA
Pre amplifier gain	1000 V/A, 50 000 V/A
PSD bias voltage	0-30 V (continuously variable)
HP-filter cutoff frequency	150 Hz (on/off)

Digital Part

A/D conversion	16 bit
Sampling frequency	1MHz (parallel)
Light source trigger frequency (TTL)	DC - 250 kHz
Computer interface	USB2.0

Others

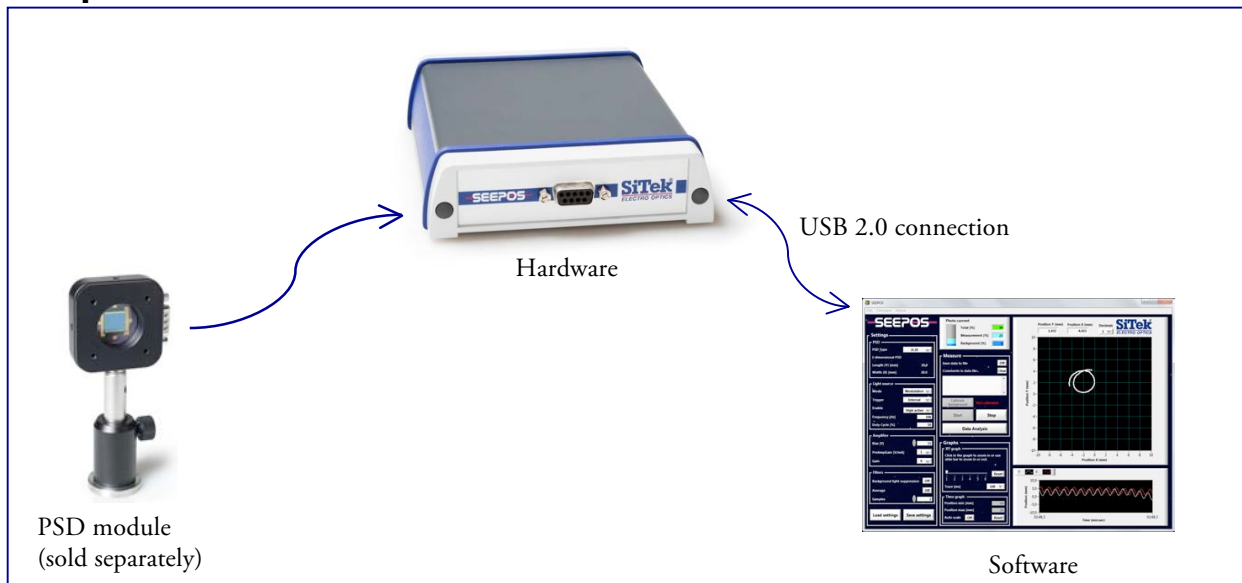|	
External light source trigger frequency (TTL)	DC - 100 kHz
PSD interface	DSUB9
Dimensions W x H x L	124,4mm x 36,2mm x 148mm

Connection

Frontside

Backside

Key Features

- Extremely versatile – all important parameters are easily adjusted
- Highest performance – 16 bit A/D conversion at 1 MHz and full speed USB data transfer
- User friendly – intuitive interface based on LabView
- Suitable for all users – Easy set-up and advanced analyzing functions included

Example of Applications

- Development measurements
- Beam alignment
- Optical system quality control
- Monitoring of vibration deflection and motion
- Target rotation and displacement
- Fast steering mirror measurement

Setup

USB 2.0 connection

Hardware

PSD module
(sold separately)

Software

Complete **SEEPOS** is delivered with:
Hardware, Software, USB cable, Power supply and User manual.

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.