# Precision Tool Commander (PTC)

The Precision Tool Commander is the Main Graphical User Interface to Control your Positioning Stages and Systems.
The Precision Tool Commander offers a graphical user interface to interact with MCS2 and SMARPOD controllers. Connected stages can be controlled in open-loop, closed-loop and piezo-scan mode.
It also allows quick switching between configurations of the positioning systems used in your setup. The PTC´s user interface gives the user access to different software modules.

Dashboard
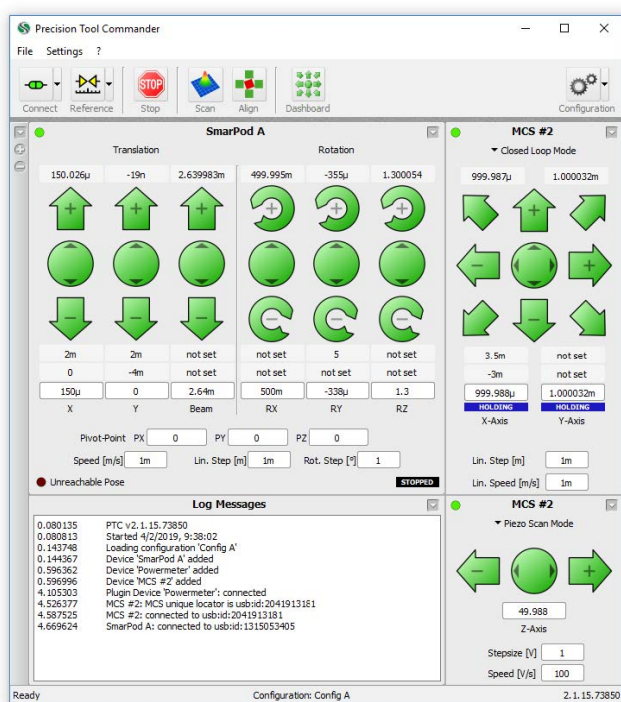
The dashboard represents an easy and intuitive way to control SmarAct stages independent of their complexity from single stages to our hexapod-like SMARPODs and TRIPODs. Stages can be moved by direct input of the destination position, or by using your computers mouse. Also multiple positioning systems can be simultaneously controlled with the PTC, giving you access to a high number of stages from a single software.

Scan
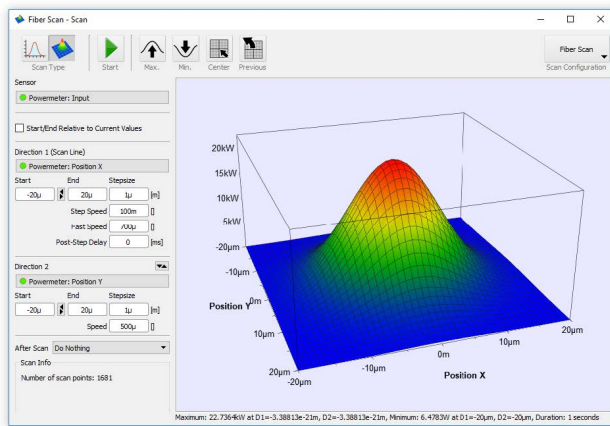
The Precision Tool Commander uses driver plugins to communicate with third party devices. Data measured by these external sensors can be correlated by the PTC to the position data of the stages. Thus, allowing to perform 1D and 2D position scans while logging additional sensor data. The PTC is able to display these 3D data sets as well as export them as an image or a CSV file. Please feel free to contact our application scientists to receive a list of supported third party measurement equipment or discuss the possibility to integrate your own measurement devices.

Align
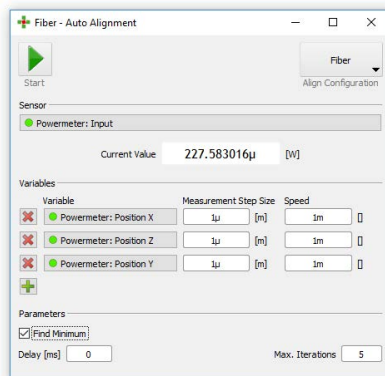
The Align software module makes also use of the Precision Tool Commanders ability to communicate with third party measurement equipment. It uses an iterative algorithm to find the optimum position for defined axes of a positioning system to minimize or maximize an input value measured by the selected sensor. Typical Applications for the Align Module of the PTC are fiber coupling, beam-profiling, quality assurance and assistance for micro-assemblies.