

Feature: Modularity of μShape™

General

The μShape™ interferometer software is a modular designed software package that can be customized for your specific requirements. The main idea of the software is to separate data acquisition from data analysis and display. The interface between data acquisition and data analysis is the so-called raw phase map. That map describes the measured aberration over a 2-dimensional area, which can be a part of a flat, spherical, cylindrical or any other surface or wave front. The raw phase map can be created in arbitrary ways, for example through analysing some phase shifted fringe patterns or static fringe analysis.

On the other hand, there are several analysis and display methods of the raw phase map available. The most important ones are part of the standard software package, more specific or complex ones are available as add-on modules.

This modularity enables the user to configure the μShape™ according to individual requirements. Most unnecessary features can be disabled by license or by manually unselecting. This makes the user interface more clearly and more user-friendly and prevents operating errors.

1. Program versions

The separation of data acquisition and data analysis can be seen in the different μShape™ program versions available. All versions offer the same data display, but differ in the data analysis and acquisition.

The μShape™ Analyzer allows analysing up to 5 interferogram images loaded into μShape™ as bitmap files. Hardware, like cameras or phase shifters, is not supported.

The μShape™ FastFringe allows grabbing a fringe image directly from a camera. Phase shifting techniques are not required and available.

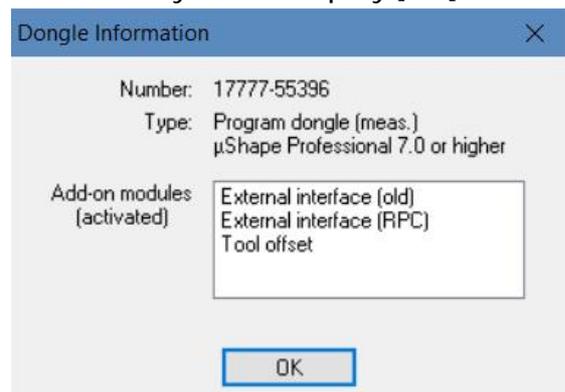
The μShape™ Professional finally is the all-rounder supports several cameras and phase shifters and allows using all fringe analysis methods.

Each version offers the main features necessary to fulfil typical measurements and analyses related to its purpose and can be extended by several add-on modules.

2. Add-on Modules

All add-on modules are controlled by the dongle delivered with the software. There are different modules for the data acquisition as well as for data analysis and display [O1]. Some of the modules are available only for individual program versions [O2].

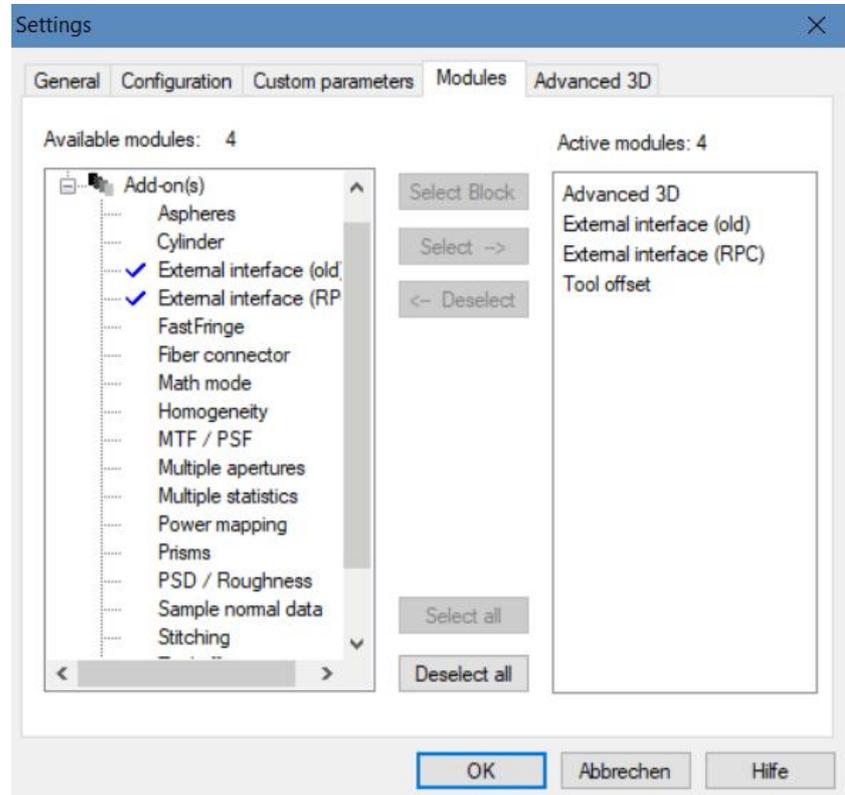
The number of modules and their contents is extended permanently. The software itself always includes the whole functionality up to its release version but only the modules enabled by the dongle are actual available. The available add-ons can be easily found by taking a look at the **<Dongle Info>** dialog. This dialog lists all modules which are currently activated by the dongle.



Modules currently not activated by the dongle can be added even later by ordering a licence upgrade (see [G1] how it can applied). Ask your software supplier if you want to test any module in advance.

Starting with version 5.3 μShape™ also offers the possibility to disable modules which are enabled by the dongle license temporarily for the local installation. These modules are then marked as disabled and its user interface is hidden. Changing the module settings is done in the **<Module Settings> dialog**. Here all available modules are listed and can be selected individually as active modules. The activation and deactivation can be changed easily by the user itself.

Both dialogs are accessible by the **<Extra> menu**.



3. Reference Documents

- [O1] Overview μShape™ Add-on modules ("Overviews_Modules.pdf")
- [O2] Overview μShape™ Software Versions ("Overview_Features.pdf")
- [G1] Feature: Modularity of μShape(TM) ("mShape_Upgrade.pdf")

The references can be found in our download area (www.trioptics-berlin.com/downloads).

If you need more information don't hesitate to contact us at software@trioptics-berlin.com.