

# HiPic/Spectro

High Performance Image Control and  
Processing Software for Spectroscopy



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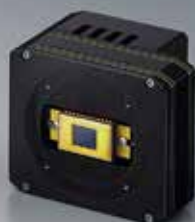
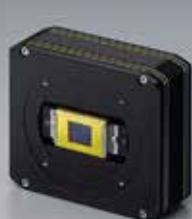
# HiPic/Spectro

## About HiPic/Spectro

Based on our renowned HiPic general-purpose imaging software, HiPic/Spectro is specially designed for spectroscopic applications. It controls not only Hamamatsu sensor modules such as Mini-Spectrometers, but also spectrographs, pulse generators, image intensifiers and Hamamatsu cameras which are suitable for spectroscopic measurements.

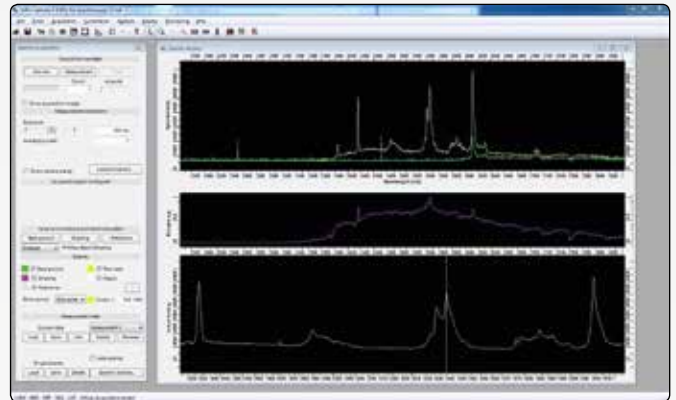
### Features

- Support of all cameras and sensors through DCAM
- Support of other devices through internal driver
- Support of spectrographs and delay generator
- Creation and processing of one-dimensional spectra in floating point arithmetic
- Calculation of emission, absorbance and transmission
- Support of wavelength calibration, background and shading calibration, lamp calibration and reference measurement
- Dedicated measurement dialog



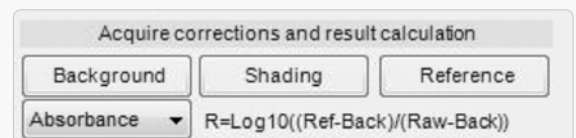
## Hardware Control and Spectrum Acquisition

- Preview and measurement mode
- Control panels for settings for spectrographs, cameras and image intensifiers
- Individual display setup (panes for Background, Shading, Reference, Raw data and Resulting spectrum)
- Acquisition of single spectra or sequences



## Data Storage

- Measurement and correction data are stored in one file
- Sequences are stored in a single file
- Resulting spectra saved separately
- Data are saved in ASCII format – easy to import in other programs for further evaluation
- Recovery function



## Correction and Calibration

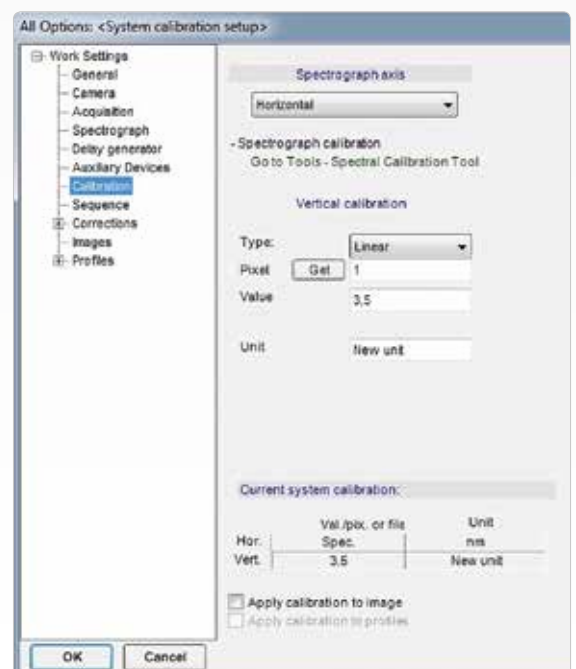
HiPic/Spectro offers the possibility of measuring and storing correction spectra including Background, Shading and a reference spectrum. These data can also be stored and loaded using separate files (for example to use different reference spectra for comparison).

Furthermore a spectral calibration can be easily performed. For Hamamatsu Mini-spectrometers, the calibration provided by the factory is automatically imported and displayed.

### Calculations:

For data analysis the following functions are available:

- Emission:  $R = (\text{Raw-Back})/\text{Shading}$
- Absorbance:  $R = \text{Log}_{10} ((\text{Ref-Back})/(\text{Raw-Back}))$
- Transmission:  $R = (\text{Raw-Back})/(\text{Ref-Back})$



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