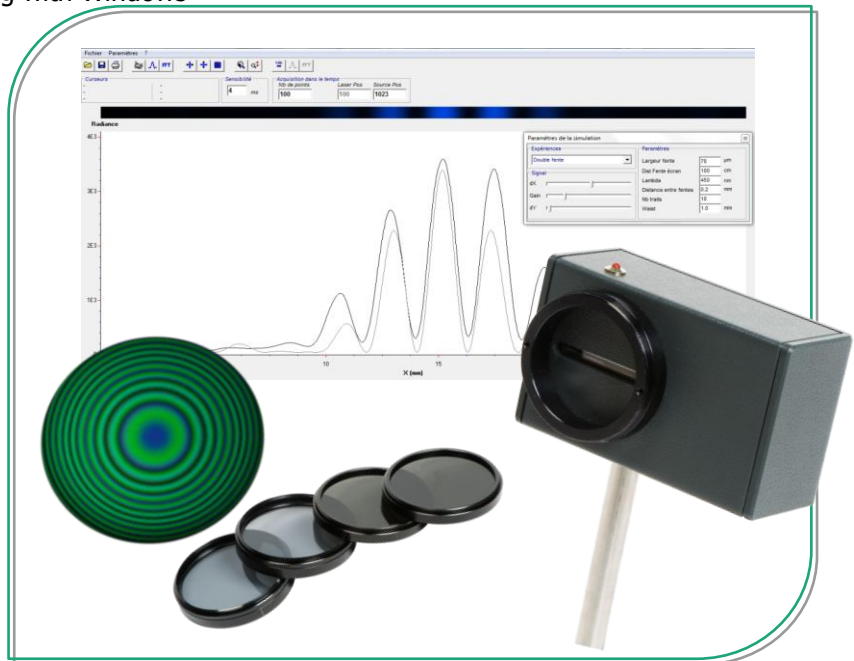


CCD Caliens Camera, ref POD 010 020

Composition

- 1 CCD camera
- 1 complete software, operating with Windows
- 1 USB cable
- 1 Ø 10-mm rod
- 1 shading filter, density 3
- 1 set of 4 filters
 (2 polarizers, 2 0.9-density)
- 1 carrying case
- Complete documentation



Presentation

The Caliens camera is a CCD sensor which allows the measurement of very precise distances. With its **2048 pixels**, we can use it for :

- **The Study of diffraction and interferences**
- **The Sampling of light images – Complete software, user friendly.**
- **The Analysis of analogical/digital signals, function of the resolution of the converter**
- **The Modelling of theoretical curves.**
- **The Time acquisition of the interferograms of the Michelson interferometer**

Performances

- Sensor : 2048 pixels (14- μ m wide)
 (sensitive zone : approx. 30 mm).
- Adjustable integration time : 2 ms to 5 s
- Time acquisition
- Fourier's transform

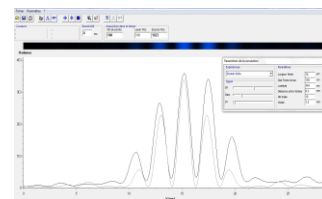
Some examples of manipulations...

Interferences Diffraction

With a simple setting (laser + slits), you get your light diagram on the sensitive zone.
The curve acquisition is instantaneous.

You can refine your settings and display visualisez the « Cardinal sine ».

You can simulate the theoretical curve and make the comparison with the real experimental curve.

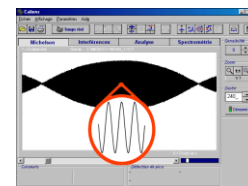


Oscillogram of a source

With CALIENS, you can sample oscillating phenomenae.

This mode is very usefull for the use with Michelson interferometers.

Register and print your oscillograms. The FFT gives you access to the basis of spectrometry with Fourier transform



OPTIONAL EXTRA :

Study of a CCD sensor

Now, with this additional cable, you can explain the principle of CCD photosensitvie sensors and show the relation between the light received by the sensor and the electrical measure.

This cable retrieves the "raw" signals of the sensor, clock, trigger and the signal on an oscilloscope or a C.A.O. interface.

Cable for the study of a CCD sensor **POF010610**



FRENCH CONCEPTION AND MANUFACTURING.