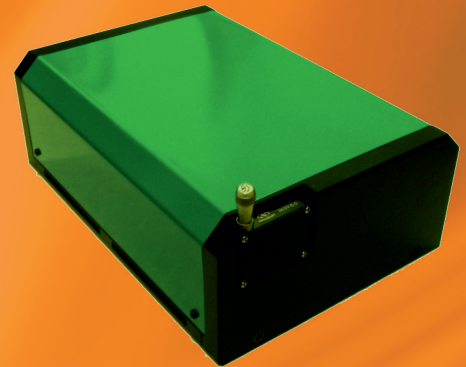


## two dimensional imaging spectrograph for arbitrary applications of ultrashort pulse characterization in near-infrared – especially dispersion measurement by spectrally and spatially resolved interferometry with PhADIM-D

**CEO-2D-NIR-V** is an ultimate tool in any ultrafast NIR laser laboratory. Designed for spectrally and spatially resolved interferometry (SSRI), this spectrograph is capable to measure angular and material dispersion with extreme high accuracy (with the additional use of **PhADIM-D**). They are also compatible with conventional pulse characterization techniques, like *FROG* and *SEA-SPIDER*; and beyond that, they open a way to unlimited experimental applications.

**CEO-2D-NIR-V** offers a variable wavelength range, which is inevitable when accurate spectral measurements needed for pulses with diverse bandwidths. Our device can be switched easily between three different wavelength ranges. It is also equipped with two different detectors, one covers the spectral range between 900-1700 nm well, while the other offers high sensitivity around 1500 nm.

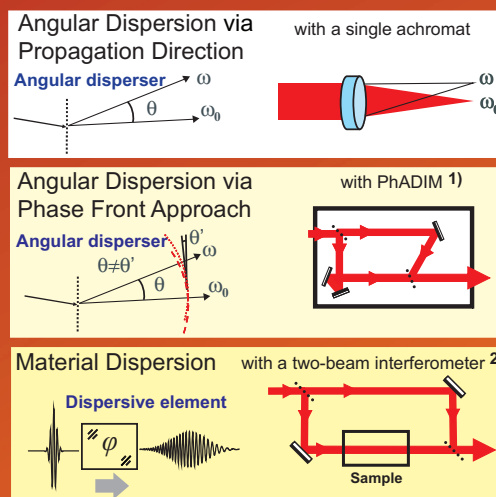


Specifications	with detector A	with detector B
Wavelength range:	900-1700 nm	1460-1625 nm
Spectral sensitivity:	300 $\mu\text{W}/\text{cm}^2$ @ 1310 nm 20 $\text{mW}/\text{cm}^2$ @ 1550 nm 80 $\text{mW}/\text{cm}^2$ @ 1700 nm	less than 5 $\mu\text{W}/\text{cm}^2$ @ 1550 nm
Wavelength range span:	113 / 38 / 22 nm	81 / 27 / 16 nm
Spectral resolution:	0.09 / 0.03 / 0.02 nm	0.11 / 0.036 / 0.022 nm
Spatial range:	6.4 / 96 / 128 mm	4.8 / 73 / 97 mm
Spatial resolution:	6.3 / 94 / 12.5 $\mu\text{m}$	8.3 / 12.5 / 16.6 $\mu\text{m}$
Detector type:	CMOS	CMOS with phosphor layer
Detector resolution:	1280x1024	752 x 582
Connection	USB 2.0	Analog converted to USB
Triggerable:	No	No

A basic software is provided to capture images in various formats (ascii, bmp, tiff, png, jpg).  
Dimensions in mm (LxWxH): 355x210x100.

### Accessories (optional)

- FRINGER software for evaluation of SSRI interferograms
- PhADIM/PhADIM-D for SSRI dispersion measurements
- MePS, high accuracy beam rotator for 2D characterisation of the beam.



**CEO-2D-NIR-V  
Imaging  
spectrograph**