

# IndiGo VIS-NIR

Handheld modular spectrometer

## About GoyaLab

GoyaLab is a French company that designs, develops, and markets measurement tools based on spectrometry. Moreover, GoyaLab provides expertise in Research and Development, serving the industry in the development of custom applications in spectrometry.

GoyaLab's philosophy is to develop powerful spectrometry tools that are easy to use, mobile and affordable thanks to new communication technologies.

GoyaLab wants to democratize spectrometry and make it accessible to everyone.



## With IndiGo, the power of spectroscopy is at your fingertips.

IndiGo VIS-NIR is a modular handheld visible and near infrared spectrometer. This new spectrometer allows the user to measure emission, absorption, or transmission spectra directly on a smartphone or a PC. The wavelength range goes from 400nm up to 1000nm with a typical resolution of less than 2 nm (FWHM).

IndiGo VIS-NIR is perfectly adapted to multimodal analysis.

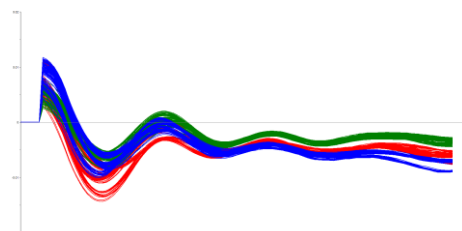
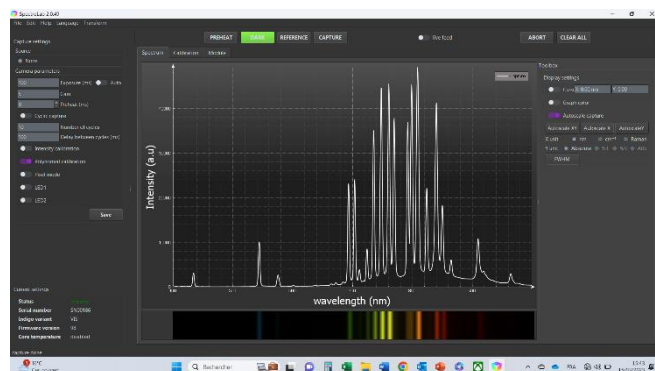
IndiGo VIS-NIR can allow analyses on liquid or on solid samples and is fully compatible with all the GoyaLab modules.

IndiGo VIS-NIR is delivered in standard with its SMA connector module.



## Features

- > Modular spectrometer
- > Bluetooth & USB-C connectivity
- > Battery or mains powered.
- > CE & TELEC certifications (FCC on-going)
- > Delivered with SpectroLab (Android & Windows)



## Optional modules

### LED EXCITATION MODULE

The LED module allows the user to add a light source to the IndiGo. This LED module is fully customisable in function of the needs. It can contain up to 2 different light sources from 255nm up to 1040nm.

This module is very useful for measuring fluorescence spectra in various products (such as food products, fluorescent dyes, taggants, security inks).

### CUVETTE HOLDER MODULE

This module allows the user to measure spectra in liquids thanks to its cuvette holder. This module can be customised with up to 2 different excitation sources. The thermal regulation system ensures the thermal stability of the sources for precise measures.

This module is very useful for chemical analyses, OD measurements...



## Specifications

PHYSICAL	
Dimension	86 x 45 x 53 mm
Weight	107g

SPECTROMETER	
Sensor	Sony CMOS IMX334 monochrome Dim: 3840*2160 pixel size: 2µm
Wavelength Range	400nm - 1000 nm
Spectral Resolution	<2 nm (FWHM)
Slit (W x H)	15 µm x 3 mm
Grating	300 Lines/mm
Integration Time Range	1ms-30s (multi cycles acquisition available)

### SYSTEME CONFIGURATIONS

Battery	Li- polymer – 1000mAh 10h in operation & 24h in standby mode
Data Format	.txt – CVS .spc
Power	5V - 750mA

### ENVIRONMENTAL CONDITIONS

Temperature	0°C - 30°C operation & -10°C - 40°C Stockage
Humidity	0% - 90% noncondensing

### INTERFACES

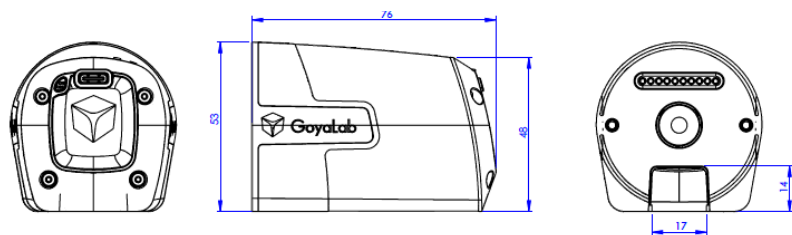
Bluetooth	5.0 Bluetooth Low Energy
USB	USB-C

### CALIBRATION

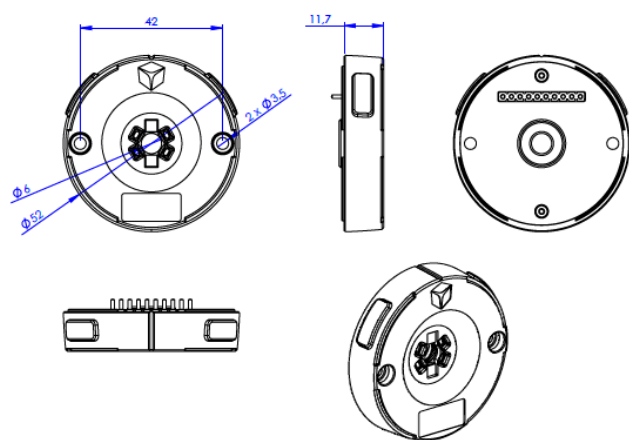
Wavelength	Made in factory with Hg / Ar low pressure lamp
Intensity	Available in option

## Dimensions

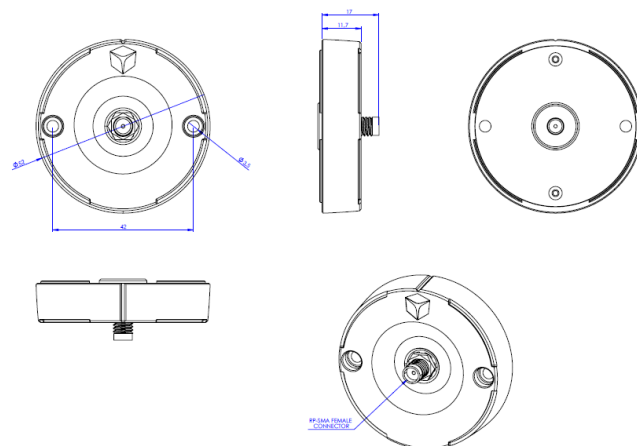
### Core module



### UV module



### Optical fiber adapter



### Cuvette holder module

