



# IndiGo

Handheld modular spectrometer

# **About GoyaLab**

GoyaLab is a French start-up that designs, develops and markets measurement tools based on spectrometry. Moreover, it provides expertise in Research and Development, serving the industry in the development of specific 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 (smartphones, tablets).

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



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

IndiGo is a modular handheld spectrometer connected to a smartphone by Bluetooth. This new spectrometer allows the user to measure emission, absorption or transmission spectra directly on a smartphone. The wavelength range goes from 370 nm up to 810 nm with a resolution of 5 nm. IndiGo is compatible with all smartphones with a Bluetooth 5.0 connection.

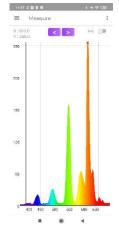
Thanks to its dedicated app available on Android 7.0 (soon on iOS), it allows the user to make measurements anywhere, anytime, at a reasonable cost.

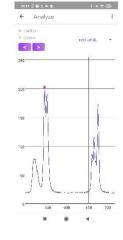
With its optional modules, IndiGo can become a fluorescence spectrometer or a chemical analyser that fits in your pocket.



## **Features**

- > Modular spectrometer
- > Bluetooth connectivity
- > Battery or mains powered
- > CE certification (FCC on-going)
- > Plug-n-Play Interface for PC applications
- > Available on Android (soon on iOS)







## **Optional modules**

#### **OPTICAL FIBER ADAPTOR**

The module allows the user to adapt an optical fiber with a SMA connector, in order to make the measurement less sensitive to alignment and to make it more flexible.





#### **UV MODULE**

The LED module allows the user to add a light source to the IndiGo. This LED accessory is supplied with up to 6 UV-A LEDs at (375nm) as standard. The wavelength can be customized and can include UV-B LEDs (300nm). This module is very useful for measuring fluorescence spectra in various products such as food products, fluorescent inks or taggants, or various impurities, even at trace level.

#### **LASER MODULE**

This module includes a laser excitation source at 532nm (other wavelengths available upon request) and a set of filters to perform laser-induced fluorescence measurements or Raman measurements.

This module is very useful for measuring fluorescence spectra in various products such as food products, or various impurities, even at trace level and for the diamonds identification.





#### **CUVETTE HOLDER MODULE**

This module allows the user to measure spectra in liquids thanks to its cuvette holder. This module offers 2 types of lighting: a white LED for absorption and UV- A LEDs for fluorescence.

This module is very useful for chemical analyses.

# **Specifications**

PHYSICAL		
Dimension	76 x 45 x 53 mm	
Weight	107g	

SPECTROMETER		
Sensor	1,3MP monochrome CMOS 1,280H x 1,024V	
Wavelength Range	370 - 810 nm	
Wavelength Data Increment	1nm	
Spectral Resolution	5nm (FWHM)	
Wavelength Reproducibility	1nm	
Integration Time Range	10ms-2000ms	

### SYSTEME CONFIGURATIONS

Battery	10h in operation & 24h in standby mode
Data Format	.txt
Power	5V - 750mA

## **ENVIRONMENTAL CONDITIONS**

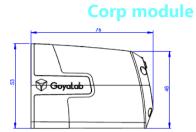
	0°C - 30°C operation & -10°C - 40°C
Temperature	Stockage
Humidity	0% - 90% noncondensing

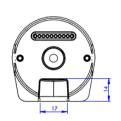
## *INTERFACES*

Bluetooth	5.0 Bluetooth Low Energy	
USB	USB-C	
CALIBRATION		
Wavelength	Made in factory	
Intensity	Available in option	

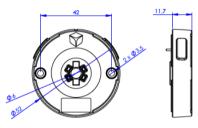
# **Dimensions**







## **UV** module



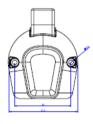


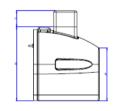


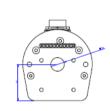
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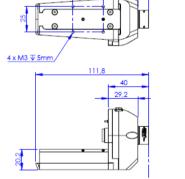
**Cuvette holder module** 



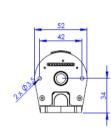




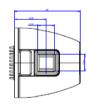




**Laser module** 









# **Optical fiber adapter**

