# YSM-8105-05 Series # 128 Pixels InGaAs NIR Spectrometer

#### **Description**

With the compact size and Hamamatsu 128 pixels InGaAs detector, YSM-8105-05 series NIR spectrometers have extremely low power consumption within the wavelength range of 950nm-1700nm, which is suitable for the applications of food sorting,



biopharmaceutical and life sciences, as well as system integration. With the replaceable slit design, the spectrometer can be configured as different resolutions and sensitivities for different applications.

#### **Model List**

Model	Wavelength Range	Sub Model	Resolution	Slit	Grating	Filter	Lens
YSM-8105-05-01	950nm-1700nm	16S03L00F00G32	~10nm	25 μ m	150g/mm@1250nm		

<sup>\*</sup>Other wavelength ranges and resolutions can be customized.

#### **Features**

Hamamatsu 128 pixels uncooling InGaAs detector
Compact size and easy for system integration
Replaceable slit design for different resolution and sensitivity
Real-time display peak wavelength and FWHM
RS232, Trigger modes, SDK and Deep customization are available

# **Application**

Grain and seed moisture analysis

Quality monitoring of Fruits and Meat

Process monitoring of Drug and Plastics manufacturing

NIR Laser's CWL and FWHM

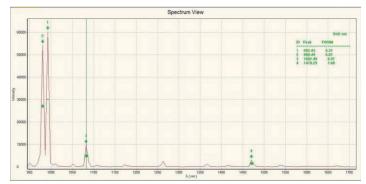


<sup>\*</sup>Cylinder lenses can be added to some models to increase the sensitivity.

### **Specifications**

Model	YSM-8105-05			
	InGaAs			
Detector	128 pixels			
Detector	Pixel size 50μm×250μm			
	Wavelength response range 950nm-1700nm			
Dimension	165mm×110mm×38mm			
Wavelength Range	950nm-1700nm (pre-configured)			
Optical Resolution	~10nm (pre-configured 25μm slit)			
A/D	16bit			
Signal-to-Noise Ratio	10000:1			
Integration Time	0.1ms-65s			
Dynamic Range	14000:1			
T	4 types (normal trigger, software trigger,			
Trigger Mode	hardware trigger, synchronous trigger)			
Power Consumption	5VDC , 300mA			
Fiber Connector	SMA905			
Operating Temperature	5°C-35°C (recommended temperature 25°C)			
Communication Interface	USB2.0, RS232			
Operating System	Win XP, Win 7, Win 8, Win10			
Power Supply	USB			

# **Typical Data**



Xenon lamp spectrum

Tungsten lamp spectrum

### **Packing List**

1EA spectrometer, 1EA USB cable, 1EA U disk with software and manual, 1EA calibration r eport and 1EA handbox.

https://www.japanlaser.co.jp/ mail to: lase@japanlaser.co.jp