

YSM-8106-12 Series # 512 Pixels InGaAs TE-COOLING NIR Spectrometer

Description

NIR spectroscopy is widely used in food, chemical, pharmaceutical, agricultural and environmental industries. This series of NIR spectrometers is based on Hamamatsu's cooled array InGaAs detectors with a compact optical path and fully solidified design, USB powered, resulting in millisecond data acquisition speed, compact size, and rugged construction. Not only can it be used for laboratory NIR spectroscopy, but it can also be very easily integrated into other devices.



Features

Cross C-T optical path design, compact size for easy integration
Interchangeable slit design, supporting different slit widths for different sensitivity and resolution
Support SDK and system integration

Application

Grain and seed moisture analysis and screening
Fruit quality monitoring and screening
Meat fat and protein content detection and screening
Pharmaceutical production composition testing and process monitoring
Plastic product manufacturing composition testing and process monitoring
900nm-2500nm spectral measurements

Pre-configured models

Model	Description
YSM-8106-18-01	Wavelength range: 920nm-2470nm, Resolution: ~10nm, Slit: 25μm, Grating: 150 lines/mm, 2000nm, 16-bit A/D

* Other wavelength range and resolution can be customized

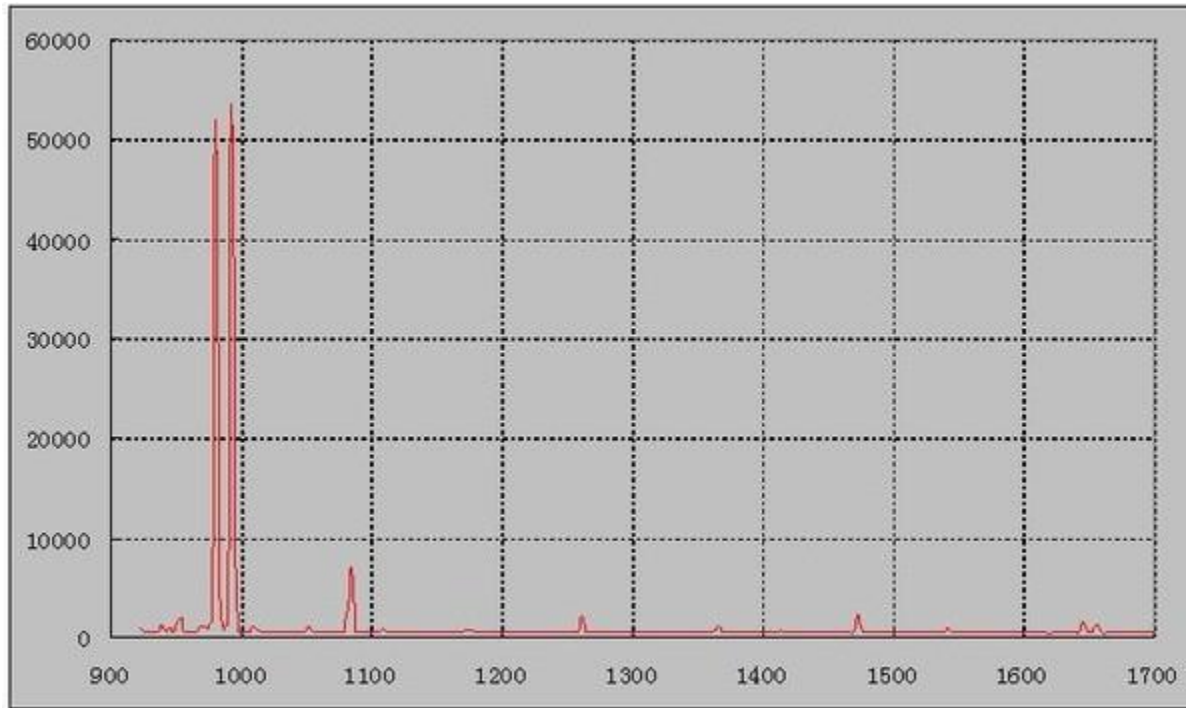
*Some models can be equipped with column lens to enhance the sensitivity of the spectrometer

YSM-8106-18 Series # 256 Pixels InGaAs TE-Cooling NIR Spectrometer

Specification

Model	YSM-8106-18
Dimension	190mm×120mm×66mm (According to the actual parameters or slightly different)
Detector	Hamamatsu G11478-256WB Pixels: 256 Image element size (μm): 50×250 Wavelength range (nm): 900-2500
A/D	16bit
Signal-to-noise ratio	2500 : 1
Dynamic range	12700 : 1
Integration time	0.1ms - 65s
Communication interface	USB2.0 (mini), RS232(other interfaces can be customized)
Power consumption	12VDC, 4A
Trigger mode	4 kinds of trigger mode: normal, software trigger, hardware trigger and synchronous trigger
Fiber optic connector	SMA905 (can be customized other fiber optic adapter)
Operating temperature	5 °C -35 °C (recommended use temperature 25 °C)
Spectral range	Depends on the specific grating
Resolution	Optimal ~1nm (determined by both grating and slit)
Operating system	Win XP, Win7, Win8, Win10, Win11
Housing fixing holes	4 M3×4 threaded holes on the bottom, 2 M3×4 threaded holes on the side
Model	YSM-8106-18
Dimension	190mm×120mm×66mm (According to the actual parameters or slightly different)
Detector	Hamamatsu G11478-256WB Pixels: 256 Image element size (μm): 50×250 Wavelength range (nm): 900-2500
A/D	16bit
Signal-to-noise ratio	2500 : 1

Typical Test Data



Xenon lamp spectrogram

Package list

1 spectrometer, 1 USB cable, 1 U disk (including software and manual), 1 calibration report, 1 carrying case.