

# YSM-8106-19 series, 512 pixel InGaAs NIR spectrometer with TE Cooler

## SUMMARY

Nirs are widely used in food, chemical, pharmaceutical, agriculture and environmental protection industries. YSM-8106-19 series NIR spectrometer uses Hamamatsu's uncooled array InGaAs detector (512 pixels). At the same time, this series of spectrometer adopts USB communication and power supply, with millisecond data acquisition speed, compact size, durable structure. Not only can be used in the laboratory near infrared spectroscopy analysis, but also very local integration into other equipment.



## FEATURES

1. Cross C-T optical path design, compact size and easy integration.
2. The slit replaceable design supports the replacement of different widths of the slit to obtain different sensitivity and resolution.
3. Provides SDK to support secondary development and system integration.

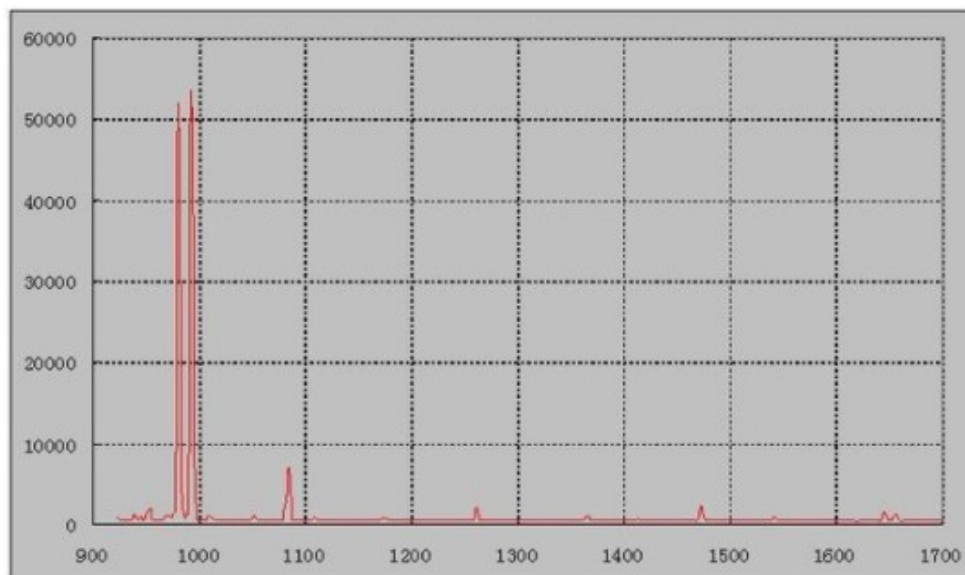
## APPLICATIONS

1. Grain and seed moisture analysis and screening.
2. Fruit quality monitoring and screening.
3. Meat fat and protein content detection and screening.
4. Drug manufacturing component testing and process monitoring.
5. Plastics production component testing and process monitoring.
6. Measurements in the 900nm-2500nm spectral range.

## Parameter

|                         |  |
|-------------------------|--|
| Model                   | YSM-8106-19  |
| Detector                | InGaAs(G11478-512WB)<br>512 pixels<br>Pixel size 25 $\mu$ m $\times$ 250 $\mu$ m<br>Wavelength response range 900nm-2500nm |
| Dimension               | 190mm $\times$ 120mm $\times$ 66mm   |
| Wavelength Range        | 900nm-2500nm (pre-configured)  |
| Optical Resolution      | $\sim$ 10nm(pre-configured 25 $\mu$ m slit)  |
| A/D                     | 16bit  |
| Integration Time        | 0.1ms-65s  |
| Dynamic Range           | 10000:1  |
| Trigger Mode            | 4 types (normal trigger, software trigger, hardware trigger, synchronous trigger)  |
| Power Consumption       | 12VDC, 4A  |
| Fiber Connector         | SMA905   |
| Operating Temperature   | 5 $^{\circ}$ C-35 $^{\circ}$ C (recommended temperature 25 $^{\circ}$ C)   |
| Communication Interface | USB2.0, RS232  |
| Operating System        | Win XP, Win 7, Win 8, Win10  |

## Typical Data



Xenon lamp spectrum

## Packing List

1 spectrometer, 1 USB data cable, 1 U disk (software and user manual),  
1 calibration report, and 1 suitcase.