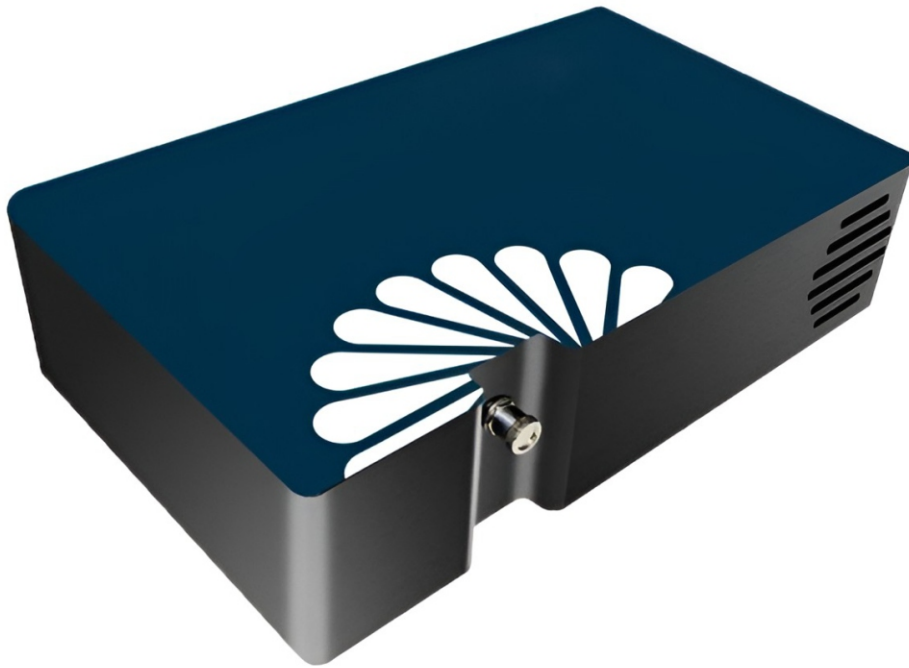


STALWART

Mini NIR Spectrometer SNIR-86 Series



SNIR-86 Series

Introduction

- SNIR-86 covers 900-1700nm NIR spectrometer developed by Stalwart for customers have less budget NIR requirements.
- It uses uncooled InGaAs detector with 256 pixels
- Compact size fit to a wide system integration in industrial measurement.
- SMA905 fiber input or free-space
- USB powered and 5V DC UART power
- custom configured wavelength range and optical resolution can satisfy different requirements
- Free SDK package for OEM customers integration

Features

- 256 pixels of InGaAs detector
- Custom configured Range: 900-1700nm (max. interval 750nm)
- Compact size fit to system integration
- Free NIR spectrometer software
- Lowest cost NIR spectrometer

Specification

Detector	
Model	Linear InGaAs CCD
Spectral Range	900-1700 nm (max. interval 750nm)
Effective Pixels	256 pixels
Pixels Dimension	25 μ m \times 250 μ m
Full Range	13.75 Me-
Dynamic	14667
Sensitivity	160 nV/e-
Performance	
Wavelength Range	900-1700nm (Customized max. interval 750nm)
Resolution	4-20nm
Signal-To-Noise	>2255:1
Working Humidity	< 90%RH
Optical	
Optical Design	f/4 crossed asymmetrical C-T
Incident Slit	5, 10, 25, 50, 100, or 200 μ m(Customized)
Incident Interface	SMA905 connector, free space

Specification

Electrical	
A/D Conversion Resolution	16 bit
Integration Time	0.1ms - 22s
Data Output	USB Type-C or UART
Supply Voltage	5V DC±5%
Current	<0.8 A
Storage Temperature	-20°C to +70°C
Working Temperature	-10°C to +50°C
Physical	
Dimension	102×57.5×29 mm ³
Weight	280g

Model	SNIR-86	SNIR-86C	SNIR-86L	SNIR-86CL	SNIR-86CL
Description	Universal spectrometer	Signal Demodulation for Fiber Sensors © (C Band)	Demodulation for Fiber Sensors (C Band) Signal Demodulation for Fiber Sensors (L-Band)	Signal demodulation for fiber optic sensors (C+L band)	Dedicated to Raman spectrometer
Wavelength Range	900-1700 nm Customized (max. interval 750nm)	1520-1570 nm	1560nm-1630 nm	1510 - 1600 nm	200-2600cm ⁻¹
Resolution	0.1-10nm	20 pm	20 pm	40 pm	15 cm ⁻¹
Detector Type	Linear InGaAs				
Slit Size	5´15´25´50´100´200´300µm, Customized				

Application

- Food sorting
- Waste water detection;
- Detection of moisture, protein, fat and fiber in crops;
- Paper sorting;
- Online monitoring of Chinese medicine production;
- Solar panel inspection;
- FBGA fiber modem;
- Laser wavelength monitoring