



High Performance NIR Spectrometer

ATP8610

Features

- Maximum working spectral range: 900-1700nm or 1350-2150nm
- Spectroscopic method: MEMS scanning spectroscopic
- Cooled InGaAs Detector
- Spectral resolution: related to the width of the entrance slit
- Power supply: DC 5V;
- ADC bit depth: 16 bits;
- Optical input: SM905 optical fiber interface or free space input;
- Data output interface: USB 2.0 and UART;

Application

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

Description

ATP8610 miniature short-wave infrared fiber optic spectrometer has small structural size. It adopts micro-electromechanical scanning optical path and low-noise InGaAs detector, which can scan quickly and position accurately. In addition, Optosky has specially customized the ultra-low noise processing circuit for ATP8610, which is an excellent level in the industry. ATP8610 can receive SMA905 fiber input light or free space light, and output the measured spectral data through USB 2.0 or UART port.

ATP8610 only needs a 5V DC power supply, or direct USB power supply, which is very convenient for integration.

Model	Feature	
ATP8610	900-1700nm	
ATP8610-22	1350-2150nm	





1. Performance

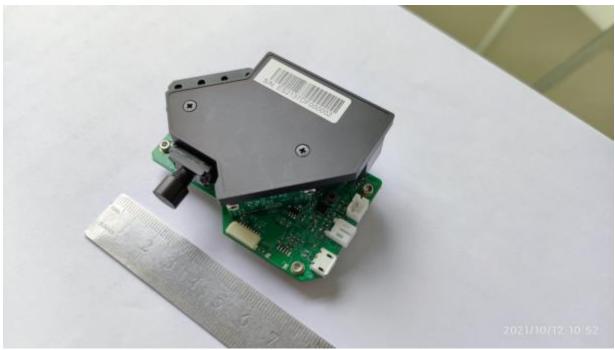
	ATP8610	ATP8610-22	
Detector			
Type	InGaAs	Cooled InGaAs	
Optical parameters			
Wavelength range	900-1700nm or 11100 ~ 5880cm ⁻¹	1350-2150nm	
Resolution	9~12 nm	12 nm	
Accuracy	±1 nm	±1 nm	
SNR	6000:1	5000:1	
Slit	1.8 x 0.025 mm	1.8 x 0.025 mm	
Optical path	MEMS Scanning Spectroscopy	MEMS Scanning Spectroscopy	
Incident light interface	SMA905	SMA905	
Electrical parameters			
Data output interface	USB and UART	USB and UART	
ADC	16 bits	16 bits	
Power	5VDC±5%	5VDC±5%	
Working current	<600 mA	<1.6 A	
Storage temperature	-20°C to +70°C	-20° C to $+70^{\circ}$ C	
Operating temperature	-10°C to +50°C	-10°C to +50°C	
Physical parameters			
Size	78 x 58 x 26 mm	78 x 58 x 26 mm	
Weight	78 g	97 g	

2. ATP8610



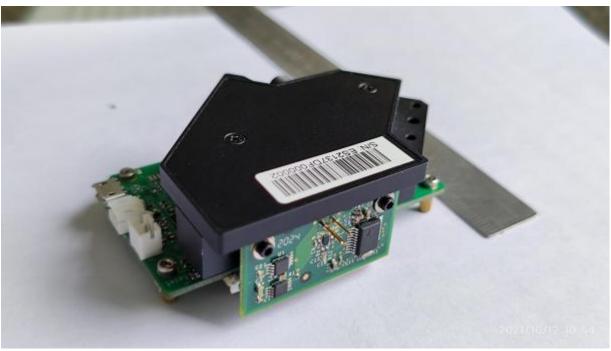






















3. ATP8610 measured spectrum

