Mid-IR Spectrometer ATP8250

Product Description

Mid-IR Spectrometer employs a 256-pixel pyroelectric linear array sensor, low-noise CCD, high reliable optical path and sensor installation, improving reliable measurement. ATP8250 receives free space light via Type-C or UART port, output scan spectral data. This spectrometer is driven by a 5VDC power supply and connects to USB port.

Models	Range	Resolution
ATP8250-5	2.5-5μm	30 nm
ATP8250-11	5.5-11μm	50 nm

Key Features

- Spectral Range: 2.5-5μm or 5.5-11μm
- Super low noise, CDS circuit
- Spectral resolution: relate to incident slit size
- Integration Time: 100 us- 100ms
- CCD configuration: 256×1 pixel, 25×250 um
- Power supply: DC 5V
- ADC bit-depth:16 bit
- ADC Sampling Rate:1MHz
- Interface: SM905 fiber port or free space input
- Data output port: Type-C UART
- 10 -pins extendable port

Typical Applications

- Biomedical: Breathing Gas, Blood, Urine Analysis
- In-process Control: Petro chemistry, Pharmaceutical Industry

1. Performance Specifications

ATP8250	
Detector Type	pyroelectric linear array sensor
Full scale range	75 dB
Wavelength Range	2.5-5μm or 5.5-11μm
Optical Resolution	20nm or 50 nm
Scan rate	10-1000 Hz
Output Interface	USB 2.0 (Type-C) or UART
ADC bit-depth	16bit
Power Supply	DC 4.5 to 5.5 V (type @5V)
Working Current	200mA @Typ.
Storage Temp.	-30°C to +70°C
Operating Temp.	-25-50 ^{O}C
Working Humidity	< 90%RH
Dimension	60×40×32 mm^3
Weight	0.2 kg