



UV SENSING SOLUTION EXPERT

- Focus on semiconductor UV sensor research and development
- Complete UV sensing solutions available



Qingdao Yingguang Innovation Technology Co., LTD

Company Introduction

Qingdao Yingguang Innovation Technology co., LTD. is a spin-off high-tech company focusing on developing and producing next generation high sensitivity ultraviolet (UV) sensors, application modules, as well as offering technical consulting services related to UV sensing. Qingdao Yingguang's headquarter and R&D center located at Qingdao, China. The core team of Qingdao Yingguang has strong R&D capability and rich experience in semiconductor device manufacturing. The mission of Qingdao Yingguang is to develop world-class UV sensing devices, leading to perfect solutions for highly sensitive and accurate UV detection.



Qingdao Yingguang is committed to developing and producing high performance UV sensing devices based on wide-bandgap semiconductors, which have drawn world-wide R&D interest in recent years. Wide-bandgap semiconductors, such as GaN and SiC, have many intrinsic material advantages, such as large bandgap energy, high thermal conductivity, high electron saturation velocity and chemical stability, making them suitable to be developed as backbone material for energy-efficient high frequency and high power devices as well as optical sensing devices working specifically in UV band. Qingdao Yingguang has completed the qualification of a device processing line and a high standard device testing lab. Through these efforts, Qingdao Yingguang is a leading company in China, which offers mass supply of high performance GaN and SiC UV sensing products with various packaging types.

GaN and SiC UV sensor have outstanding advantages in the field of UV sensing:

- 1 High detection sensitivity
- 2 No response to visible light
- 3 Small size, light weight, easy to integrate
- 4 High temperature, corrosion and radiation resistance

Technology Application



Real-time Monitoring of UV Sterilization

UV sterilization has become a development trend in the field of water treatment and air purification instead of traditional sterilization technology. In order to use ultraviolet radiation safely and reliably, it is necessary to use ultraviolet sensors to monitor the ultraviolet radiation dose in real time.



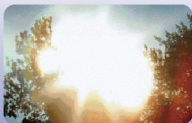
Water Quality / Waste Gas Analysis

UV differential absorption spectroscopy uses narrow-band absorption characteristics of gas molecules in the air to identify gas composition and concentration. Based on the similar principle, the UV absorption method can monitor the chemical oxygen demand COD and total organic matter content TOC in water quality monitoring in real time.



UV Curing Process Monitoring

UV curing process plays a pivotal role in semiconductor chip process, modern chemical industry, coating and printing industry, and the industry scale is huge. Online monitoring of UV radiation intensity can achieve accurate control of UV curing process and greatly improve product quality.



Solar UV Index Monitoring

Excessive UV exposure is a major cause of skin cancer and a major factor in premature skin aging, and portable UV index monitoring devices (mobile phones, wristbands, etc.) can measure the UV intensity of sunlight in real time, so that people can take defensive measures when traveling.

Other Application



Special Industrial Inspection



Biological and Medical UV Imaging



High Voltage Line Corona UV Inspection



UV Fire Alarm



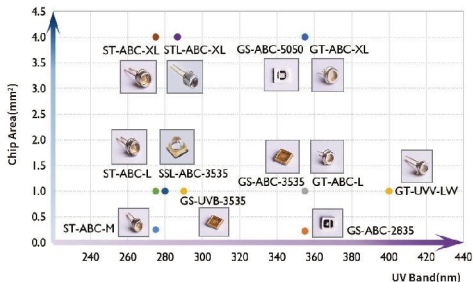
National Defense Warning and Alarm



Biochemical (blood, etc.) Testing

Product Introduction

► UV Sensor



► UV Probe for Water Treatment



Output Signal: 0-5V / 4-20 mA (selectable)

Wiring Mode: three wire , two wire

Measuring Range: 0-200 mW/cm², customizable

Waterproofing Pressure: >10Bar

► UV Curing Strength Monitoring Probe



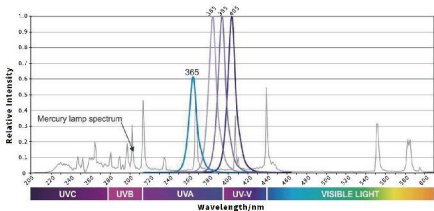
Output Signal: 0-5V / 4-20 mA (selectable)

Wiring Mode: three wire , two wire

Measuring Range: 0-20 W/cm², customizable

Working Temperature: -20-250°C

UV Curing



Wide bandgap semiconductor UV detector has the advantages of radiation resistance, long life, adjustable response wavelength range, no visible light response and other advantages, in the field of UV curing applications has significant technical advantage.

► UV Curing Application

Glue Curing
(Three Defenses) ✓

Component Bonding Curing ✓

Gel Removal ✓

PCB Exposure Machine ✓

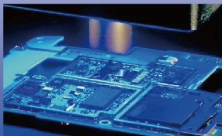
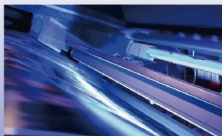
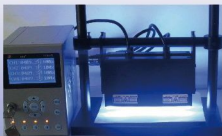
3D Printing ✓

Plastic Setting and Curing ✓

Printing and Curing ✓

Irradiation Crosslinking ✓

Pipeline Repair ✓



Product Series

Series	Model number	Encapsulation	Response Band (nm)	Chip Area (mm ²)	Typical Application	Remark	
GaN Based UV Sensor	GT-UW-LW	T046	290-440	1	Cure Monitoring Smoke Detection	In Situ Attenuation	
	GT-UW-DWD		290-440	1			
	GT-UVC-L		220-280	1	Disinfection Monitoring		
	GT-ABC-L		210-370	1	Water Quality Detection Gas Detection Disinfection Monitoring	Very Large Chip	
	GT-ABC-XL	T039	210-370	4			
	GS-UW-3535LW	SMD3535	290-440	1	Cure Monitoring Smoke Detection	High Reliability	
	GS-UW-3535DWD		290-440	1			
	GS-ABC-3535LQC		210-370	1	Water Quality Detection		
	GS-UVC-3535LQC		220-280	1	Disinfection Monitoring	Sun-blind Spectrum	
	GS-ABC-2835M	SMD2835	210-370	0.22	Gas Detection Environmental Monitoring	Ultra-small Package	
GS-ABC-1808M	SMD1808	210-370	0.05				
SiC Based UV Sensor	ST-ABC-L	T046	220-350	1	Smoke Monitoring Flame Monitoring	High Stability	
	ST-ABC-M		220-350	0.25			
	ST-UVC-L		220-280	1	Disinfection Monitoring Water Quality Testing	Sun-blind Spectrum	
	ST-UVC-M		220-280	0.25			
	ST-EUV0.25	T039	5-370	0.25	EUV Monitoring	EUV Lithography	
	ST-UUV0.25		150-370	0.25	VUV Monitoring		
	ST-EUV6		5-370	6.25	EUV Monitoring		
	ST-UUV6		150-370	6.25	VUV Monitoring	DUV Lithography	
	SS-ABC-3535LQC		SMD3535	230-360	1	Smoke Detection Water Quality Detection Arc Detection	Concentrating Package
	SS-ABC-3535MQC			230-360	0.25		
	SSL-ABC-3535LQC	230-360		1			
	SS-UVC-3535MQC	220-280		0.25	Disinfection Monitoring Gas Detection	Sun-blind Spectrum	
	SS-UVC-3535LQC	220-280		1			

Company Honors and Certificates



UVWORKS®

Qingdao Yingguang Innovation Technology Co., Ltd.