

360-2500nm High Power Halogen Tungsten Light Source

ATG1100

Feature:

- Broad spectrum:360~2500nm
- Built-in 100W Halogen lamp
- Constant current high blue spectrum output;
- High-efficiency and low-loss optical coupling
- Long lifetime>2000hrs
- High stability, spectral shift $\leq 0.5\%$ per hours
- Adjustable output light intensity
- Good heat dissipation performance to ensure continuous and stable power output

Application:

- Spectroscopic on-line measurements
- Absorbance analysis
- Reflectivity analysis
- Industrial automation
- Photochemical testing
- Solar cell testing
- Transmission/reflectivity analysis

Description:

ATG1100 Halogen Tungsten light source is a multi-purpose light source, most suitable for VIS-NIR (360 nm-2500 nm). The light source has a built-in 100W high-power high-blue halogen lamp and adopts the latest international constant current drive technology to achieve high and stable power output. ATG1100 is output through optical fiber or free space, and the optical interface is SMA905.

The light source adopts the spectrum-grade special halogen bulb imported from Germany Osram. It has the characteristics of high light efficiency, small size, easy control, good color temperature and color rendering, long life, low light attenuation, and high output power. It can be widely used Traditional desktop spectrometer and on-site portable miniature spectrometer.

ATG1100 can adjust the output power through the knob, and the required power has been obtained.

The ATG1100 halogen light source can be equipped with a cuvette holder, which can directly perform the transmission and absorption of the cuvette or filter.



1. Basic model & parameter table

Performance	Parameter
Built-in light source	100W spectrum Halogen Lamp
Light source output	SMA905 optical fiber interface
Maximum output optical power	6.3W
Output optical power adjustment method	Rotary Switches
Light Source life	>2000 hours
Color temperature	5000k
Drift of optical output:	< 0.5% per hours
Power supply	100~240V / 1A
Operating temperature	-25°C to +60°C
Dimensions	345×223×135 mm
Weight	4.6kg

2. Power stability of ATG1100

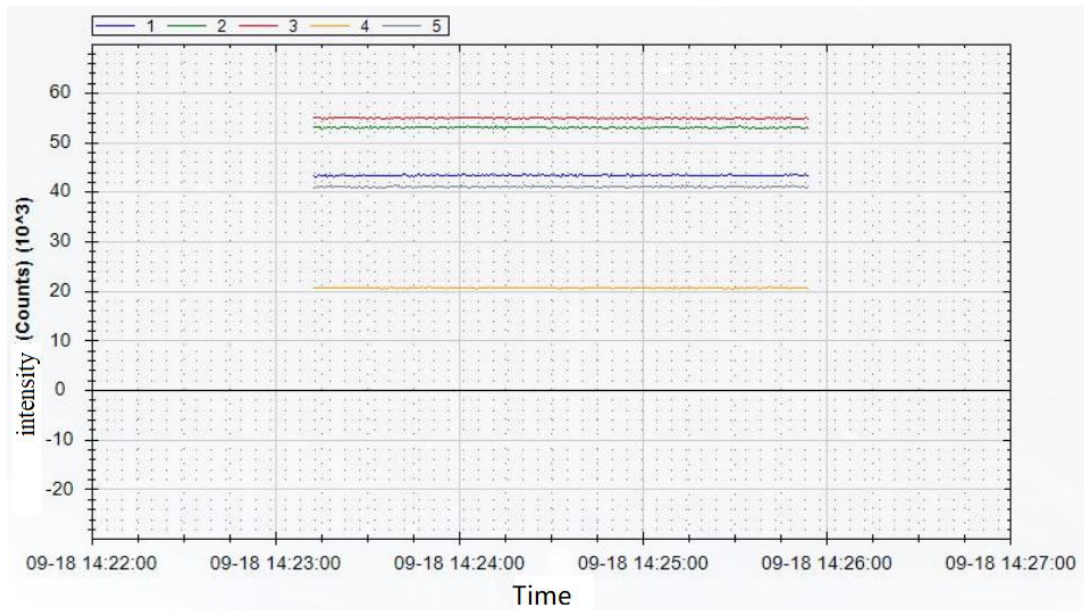


Figure 1 The output power stability test of ATG1100, the rate of change is <math>< 0.21\%</math> (tested with Optosky ATP2000P)

3. ATG1100 Picture



Figure 2 Front view of ATG1100



Figure 3 Rear view of ATG1100





4. Company Profile

Optosky company is a first-class spectroscopy solution provider, with the headquarter locates in the 7th floor of the research institute of the Chinese Academic of Science at an area of 2500 square meter in Xiamen city where successfully held the international 9th BRICK summit in 2017. The subsidiary company locates in Wuhu city with an area of 2035 square meters.

The company founder Dr. Hongfei, Liu graduated Doctor degree from the Chinese Academic of Science and postdoctoral degree from Xiamen University, by integrating both of top Universities' spectroscopy technology background into Optosky company aiming at developing the leading spectroscopy equipment in the world.

The company bases on unique technologies of Optomechatronics, Spectroscopy Analysis, Process Weak Optical and Electrical Signals, Cloud Computing, and have been developed wide products line of the competitive Raman spectroscopy instruments, micro spectrometer, hyperspectral imager, field spectroradiometer, fluorescence spectroscopy, LIBS etc. Driven by advanced technologies and products, Optosky brand has been well-known to customers all over the world.

Optosky company base on technology innovation, market-driven direction, customer first, provides first-class products and services, and one-stop solutions to many fortune 500 companies in many industries. The company received praise from different industry companies, as well as many innovative intellectual properties, software copyright, qualification certification, and winner awards over hundred numbers.

Optosky receives top class A introduced the high-tech company to international Xiamen city, the national high-tech and new innovative technology company award. The founder Dr. Hongfei Liu receives the innovation talent award by the ministry of science and technology.

The company is currently conducting the exclusive project of major industrialization national oceanic administration with a total fund of five million us dollars. The company in charge of drafting national industry standard of VNIR and SWNIR Field Spectroradiometer, and six national standard drafters, including China National Standard Drafter for Hazmat detector based on Raman spectroscopy, China National Standard Drafter for Buoy-type Monitor eco-environment, China National Standard Drafter for water quality monitor in the unmanned boat, China National Standards drafter for online water quality monitor by spectroscopy, China National Standard Drafter for UV-absorbent measure fabrics.

The company has over 70 IPs and over 20 innovative patents.

The company received ISO9001:2015 certification, CE certification, Police Administration Certification, FDA approval compliant, IQOQPQ compliant.



Figure 1 Optosky (Xiamen) Photonics Inc. Company Headquarter

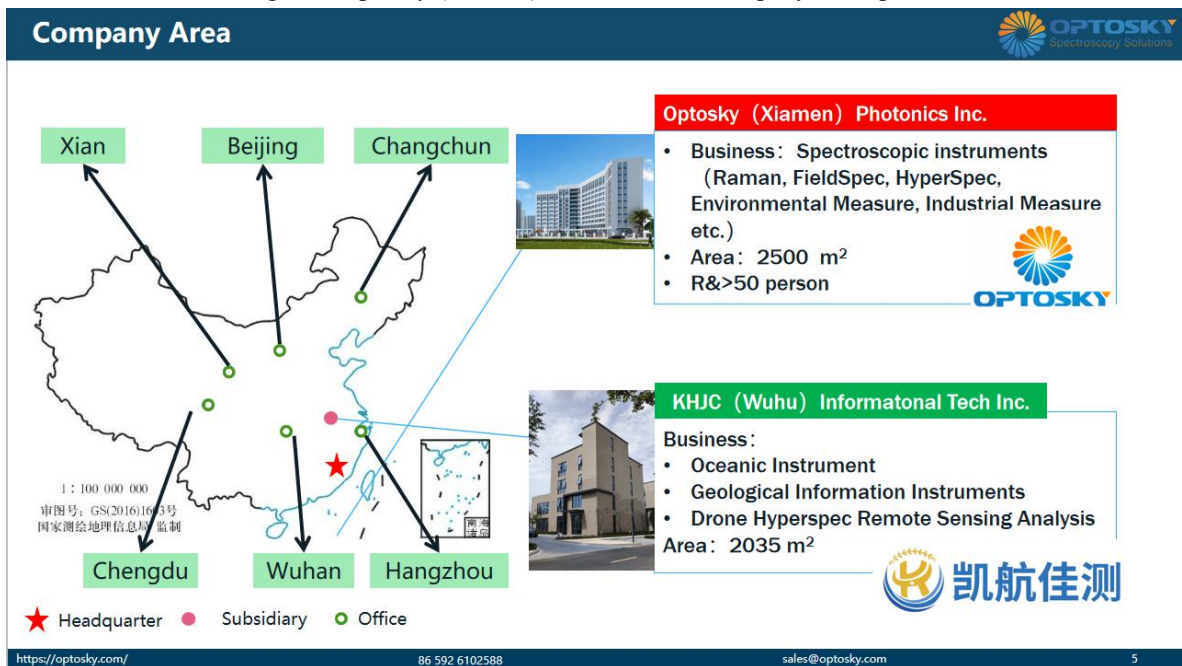


Figure 2 Optosky Company Area

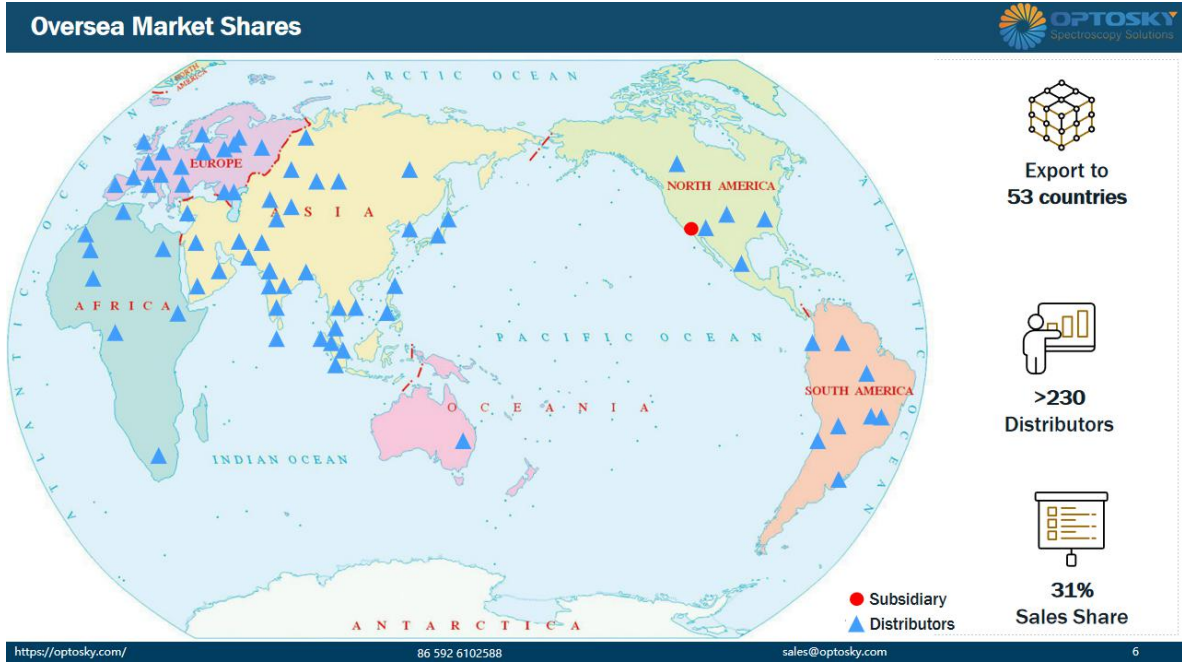


Figure 3 Oversea Market Shares



Figure 4 Optosky Chair and Draft National Standards Lists.

Qualification



 ISO9001:2005	 GB/T 23001 Informationization & Innovation	 CE, RoHS, LVD 17 models	 Police Approval 11 models
 GB/T 29490 IP implementation	 5 Innovative patents	 35 patents new utility design	 32 Software copyright

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Figure 5 Qualification

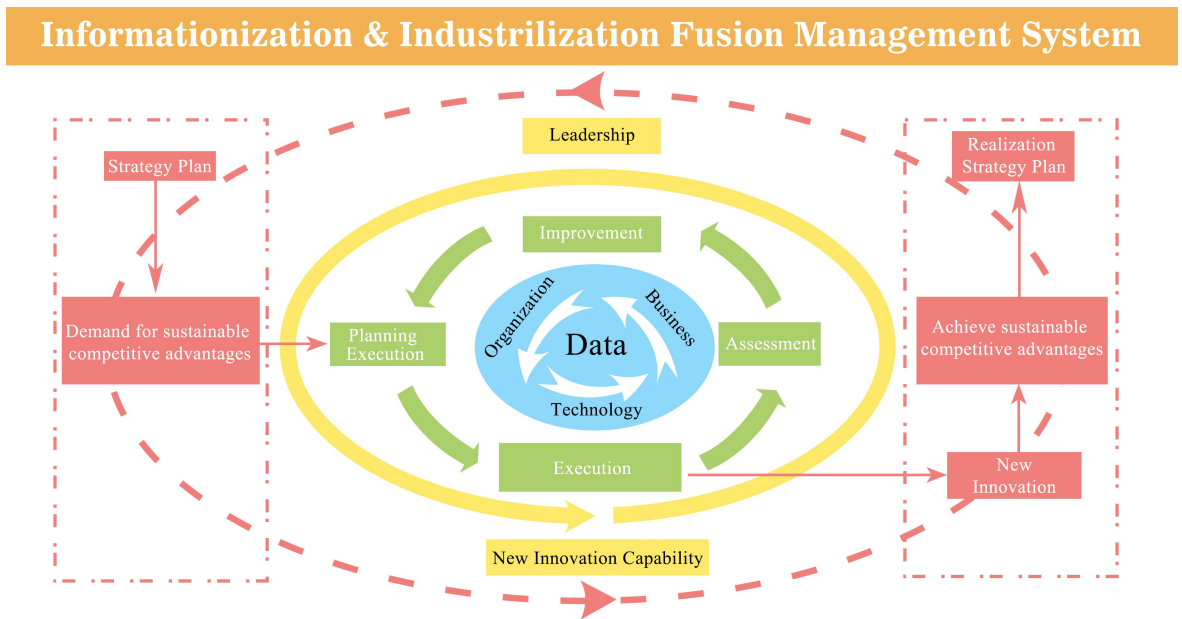


Figure 6 GB/T 23001_ Informationization & Industrilization Fusion Management System

Co-Founder—Dr. Hongfei Liu



Postdoctoral Hongfei Liu

- Selected "Innovative Talent" by Science and Technology ministry
- Top Class A Talent by Xiamen City
- CCTV Science & Technology Interview
- Fortune 500 experience in Agilent, II-VI

Honors

- Selected by science & technology ministry as "Innovation Talent"
- CCTV Science & Technology Interview
- Top Class A Talent credited by Xiamen City
- **Innovation Hero**

Education

- PhD • Chinese Science of Academic • Prof. Gui-Lin Chen, Originator in spectroscopy
- Postdoctoral • Xiamen University • Prof. Zhong-Qun Tian guided by the SERS founder M.Fleischmann

Career

- Engineer → R&D Manager → GM
- **Agilent**, Leader of instrument, Fortune 500 company, Job: engineer
- II- VI Incorporated (Nasdaq: IIVI) leader in optical & electrical industries, Job: GM of Instrumentation and Automation

Academic

- University graduate tutor
- obtain more than 60 IPs, more than 10 Innovation patents;
- Publish more than 20 papers, 2 recorded SCI, 8 recorded EI



Selected "Innovative Talent" by Science and Technology ministry



Top Class A Talent by Xiamen City



Founder & Tutors

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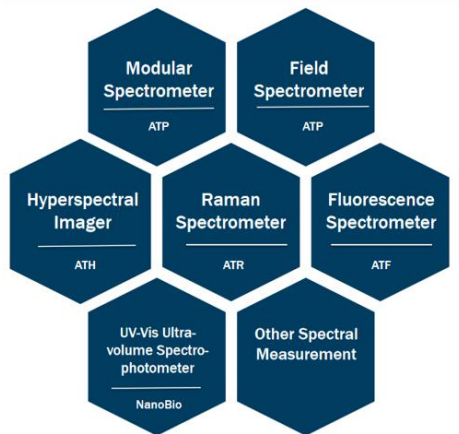
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Figure 7 Optosky's Co-founder_Dr. Hongfei Liu

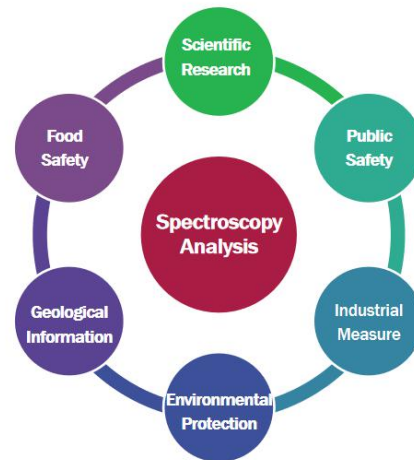
Category & Application



Category



Application




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Figure 8 Category & Application



Model Name Rule

Model Name Rule:

- Prefix
- Category
- Model
- Suffix

Prefix

↓

Abbreviation
OPTOSKY

AT R

↑

Category

3000

↑

Model

- 1064

↑

Suffix

- **ATR** - Raman Spectrometer
- **ATP** - Micro Spectrometer
- **ATH** - Hyperspectral Imager
- **ATF** - Micro Fluorescence Spectrometer
- **ATL** - LIBS
- **ATW** - Water
- **ATE** - Environment Protect
- **ATFD** - Food Safety
- **GA** - Public Safety (**Gong An**)
- **GF** - Gas Monitor (**Gas Finder**)
- **GY** - Industrial Monitor (**Gong Ye**)

eg:

- Raman Microscope: ATR8300MP-1064
- Hyperspectral Imager: ATH9500

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Figure 9 Model Name Rule