

Mercury Argon Light Source

ATG1300

Features

Band: 253-1700 nm
 Long life: 5000 hours
 High stability, drift no more than 0.2% per hour
 small volume
 Warm-up time: 30 s
 The lighting position is precise, the position is ± 0.127

Application

Spectrum online measurement
 Automated industry
 Photoelectrochemical testing
 Solar cell testing

Description

ATG1300 is a UV-visible-infrared light source system with fast response speed, small size and high stability. It is earthquake-resistant, impact-resistant and has strong performance, which can fully ensure the consistency of experimental conditions. Achieving high stability, high uniformity and no flicker.

The mercury-argon light source has the characteristics of high light efficiency, small size, easy control, good color temperature and color rendering, long life, small light attenuation, and high output power. It can be widely used in traditional desktop spectroscopic instruments and on-site portable Miniature spectroscopic instrument.

ATG1300 light source has a perfect spectral curve. It can output light from SMA905 or free space. It has been precisely adjusted to connect to the optical fiber with maximum light flux. ATG1300 can also output light sources in free space.



1. Parameter

Performance	parameter
Spectral range	About 253-1700nm
Output power	About 3W
Fiber interface	SMA905/FC
Light source life	5000 hours
Input voltage	12V
Output current	constant current
Power interface	DC interface
Operating temperature	0°C to 70°C
Size	164×100×50mm
Weight	85g

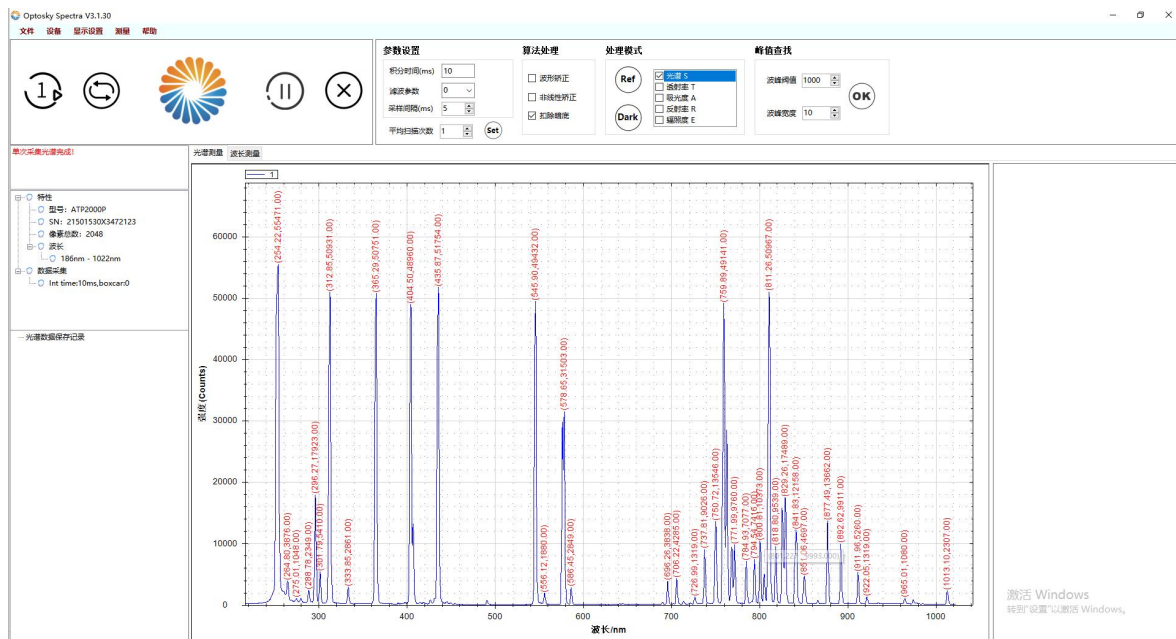


Figure 1 Output spectrum of ATG1300 (measured spectrum of ATP2000P spectrometer)

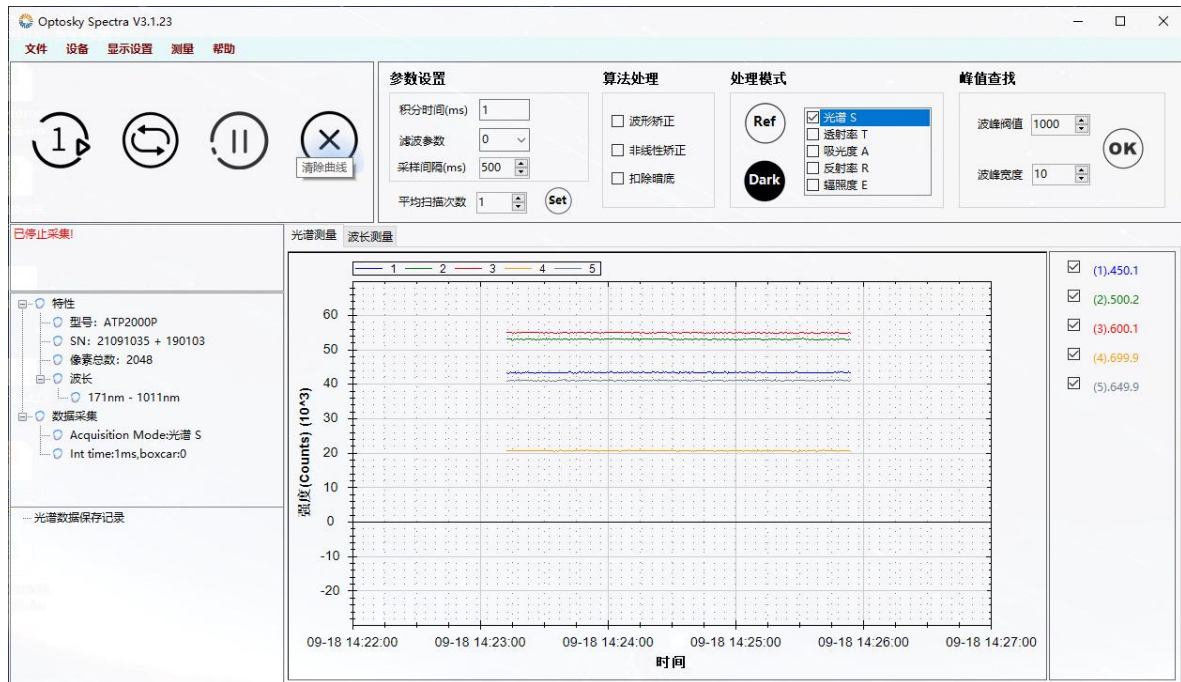


Figure 2 Output power stability of ATG1300 (change rate <math><0.13\%</math>)

2. Operation Interface





1 light source switch, 2 optical fiber interface, 3 power interface (DC12V), 4 cooling fan

3. Use Guide

(1) Inspection before use

- a. Open the package and check whether the goods are damaged or missing.
- b. Check whether the model, name, quantity and accessories of the goods match the delivery list; if any abnormalities are found, please contact the manufacturer in time.
- c. Confirm whether the power supply voltage matches the voltage indicated on the light source label.

(2), operating instructions

- a. Connect the power cord to the network power supply and power interface 3.
- b. Check whether the guide beam is firmly connected to the optical fiber interface 2.
- c. Press the light source switch 1 and the light source starts to work.
- d. Pay attention to whether the cooling fan 4 is running smoothly and is kept at least 20cm away from obstructions.

4. Precautions

(1) When the light source is working, it should be placed in a dry, ventilated and stable place. The fan holes 4 on the back of the chassis should be in line with the rear shield.

Maintain a spacing of >20cm.

(2) When the light source is working, the power connection should be securely connected. It is strictly forbidden to place any objects on the chassis and avoid pedestrian passages.

To prevent human factors from affecting the work of the light source.

(3) After the light source is turned on, do not look directly at the light guide output head or the light source output hole with the naked eye to avoid eye damage.

(4) When the light source is working, the temperature of the chassis and light output hole will rise. Please do not touch it to avoid burns.

(5) The light source should not vibrate violently and must be handled with care when moving.

(6) After using the light source, turn off the power switch, unplug the power plug, and store it in a ventilated and dry place after the high temperature in the case has dissipated.

dry place.

(7) There is a high-voltage circuit inside the machine, and non-professionals are not allowed to open the case.

(8). Light bulbs are consumables. They need to be replaced with new ones after being used for a period of time. When replacing them, lamps of the same specification and model must be used.

bubble to ensure that the light source works properly. This light source uses a 3W instrument-specific lamp.

(9). Old light bulbs after light source replacement should be placed in a trash can. Do not throw them away casually to prevent scratches caused by broken bulbs.

(10), dimming method

a. After replacing the bulb, the light spot position needs to be recalibrated, otherwise it will affect the normal use of the light source. Therefore, after replacing the bulb, power on and dim again. Before powering on the bulb, you should check whether the positive and negative poles of the bulb are connected correctly. In addition, any metal parts of the light source must not come into contact with the positive and negative metal poles and wires of the bulb, and a safety distance of more than 20mm must be maintained.

b. Replacement of light bulbs must be done by professionals. It is recommended to contact the manufacturer for after-sales service.

5. Transportation and storage conditions

- Ambient temperature: -40°C~55°C
- Relative humidity: 30%~80%
- Atmospheric pressure range: 500hPa~1060HPa