



# SOLAR 300TC

Visible Spectrophotometer



LABORATORY



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## Features

- High stability: optimized optical system and integrated aluminum alloy base structure design to ensure long-term reliability and stability of the instrument
- High degree of intelligence: dual CPU embedded system hardware design is super reliable, 128x64-bit LCD display, rich instructions, simple and convenient to use, support U disk data export; custom wavelength correction and wavelength automatic calibration function, eliminating the need for manual adjustment.

The usage time of the light source is automatically accumulated, which is convenient for understanding and viewing.

The light source switch menu can be turned off when the instrument is not in use, which can effectively prolong the service life of the instrument; Chinese and English dual languages can be automatically switched.

- Full-featured menu: built-in photometric measurement, quantitative measurement, standard curve, multi-wavelength measurement and other special programs.

- Convenient data processing: It can store up to 1000 sets of experimental data, and can also choose built-in and external micro-printers for output, or choose analysis software to connect with a computer to realize more data processing and analysis functions.

There are many optional accessories: 8-slot automatic sample holder, single-slot micro sample holder (minimum can measure 50ul samples), 5-10 cm sample holder (suitable for water quality testing), single-slot or three-slot water bath cuvettes Rack (suitable for the requirement of constant temperature sample test), which expands more application fields.

\*Optional PC-side anti-control software will realize more application functions

## Product

- Photometric measurement: in the range of 320-1100nm, you can select the single-point test wavelength and test method you need to measure the absorbance or transmittance of the sample. The concentration of the sample can also be read directly by entering the standard concentration or concentration factor.
- Quantitative measurement: measure the sample solution of unknown concentration through the curve of the known parameter factor or automatically establish the standard solution curve; with first-order, first-order zero-crossing, second-order, third-order curve fitting, and single-wavelength calibration, dual-wavelength absorption correction, three-point method optional; standard curve can be stored and recalled;
- Multi-wavelength measurement: You can set up to 30 wavelength points to measure the absorbance or transmittance of the sample solution.
- Auxiliary functions: cumulative time of tungsten lamp lighting, tungsten lamp turn off and on independently, operation language selection (Chinese, English), automatic wavelength calibration.



## Main parameters

|                             |  |
|-----------------------------|--|
| Optical system              | Self-collimating optical system, 1200/mm holographic grating |
| Wavelength range            | 320-1100nm   |
| Spectral bandwidth          | 2nm  |
| Wavelength accuracy         | ±1nm   |
| Wavelength repeatability    | ±0.5nm   |
| Transmittance accuracy      | ±0.5%T   |
| Transmittance repeatability | ±0.1%T   |
| Stray light                 | ≤0.1%T at 360nm  |
| Photometric range           | 0-200%T, -0.301-3A, 0-9999c (0-9999f)                        |
| Light source                | Tungsten lamp  |
| Data display                | 128X64 graphic LCD display                                   |
| Operating system language   | English and Chinese  |
| Data output                 | USB  |
| Input voltage and frequency | 90-250V/AC 50-60HZ   |
| Size                        | 450×390×210  |
| Weight                      | 11KG   |

## Product standard configuration

|                            |                  |
|----------------------------|------------------|
| Visible spectrophotometer  | 1                |
| Power cord                 | 1 pc             |
| 1 cm 4-slot cuvette holder | 1 pc             |
| Glass cuvettes of 1 cm     | 1 set (4 pieces) |
| Instruction manual         | 1 pc             |
| Dust cover                 | 1 pc             |



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