

Lab Companion

▶ **Ultraviolet Accelerated Aging Tester**

Q8-UV3

Custom Solution

▶ **Brief Introduction**



In Q 8/UV accelerated aging tester, the fluorescent UV of UV lamp can reproduce the influence of sunlight, and the condensation and water spray system can reproduce the influence of rain and dew. The temperature is controlled throughout the test cycle. Typical test cycles are UV exposure at high temperatures and dark wet condensation cycles with a relative humidity of 100% ; typically used in paint, automotive, plastic, wood, glue, etc. Ultraviolet (UV) radiation in sunlight is a major cause of damage to the durability of most materials. We use UV lamps to simulate the short-wavelength ultraviolet part of sunlight, which produces very little visible or infrared spectral energy. We can choose different wavelength UV lamp according to different test requirements, because each lamp in the total UV radiation energy and wavelength are different. Usually, UV lamp can be divided into UVA and UVB.

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Parameters:

Power supply specifications:

AC 220 V, 50/60 HZ, 1 ϕ 3 wire

Rated current:

AC 18 A, power 4 KW

This machine is dedicated to the above marked power supply, please use according to the rated power distribution. If the use area is changed, please contact our company. Service phone 400-628-2786.

Controller model: touch screen programmable C100

Lamp type: UVA-340

Temperature electric heat pipe: 2 KW

Humidifier electric heat pipe: 4KW

Technical Features:

Dimensions (mm)	Width	Height	Depth
Useful	1100	375	640
Overall	1350	1820	800

Homogeneity and Regulation:

Light temperature range:

50°C~70°C

Condensing temperature range:

40°C~60°C

Temperature deviation:

$\leq 2.5^{\circ}\text{C}$

Temperature fluctuation:

$\leq \pm 0.5^{\circ}\text{C}$

Temperature uniformity:

$\leq 2.5^{\circ}\text{C}$

Humidity range:

about 45%~98%RH

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Appearance Introduction and Description:

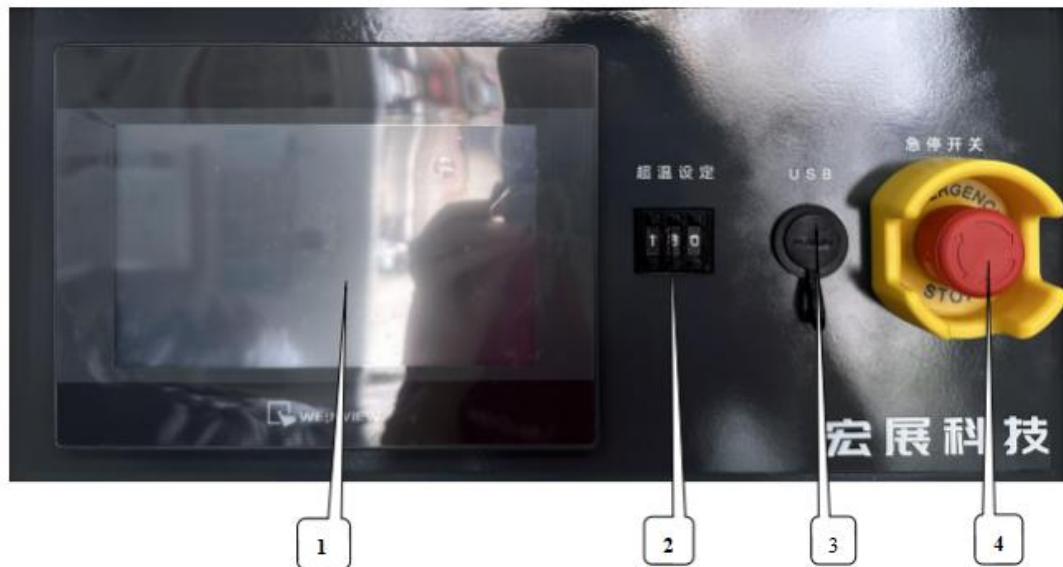
1. Front and side of the machine



Number	Name	Illustration
1	Three color lights	Green running, yellow standby, red fault
2	The control panel	Operation panel for machine operation
3	The door lock	Pull the vertical door to open it
4	The water injection port	The device adds water through the water injection port
5	Water level gauge	The remaining water in the tank can be observed

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2. Control panel



Number	Name	Illustration
1	Controller	Touch screen programmable controller (Refer to controller manual)
2	Over temperature Setting	To Set the upper temperature limit in the test area
3	USB interface	Used to copy curves or document-related data
4	Scram switch	Used to connect the device and cut off the power supply

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3. Test area



Number	Name	Illustration
1	Spray outlet	Spray tool
2	Sealant	Heat preservation and air leakage prevention
3	Sample rack track	Used to secure the sample holder
4	Sample holder	Used to place test products

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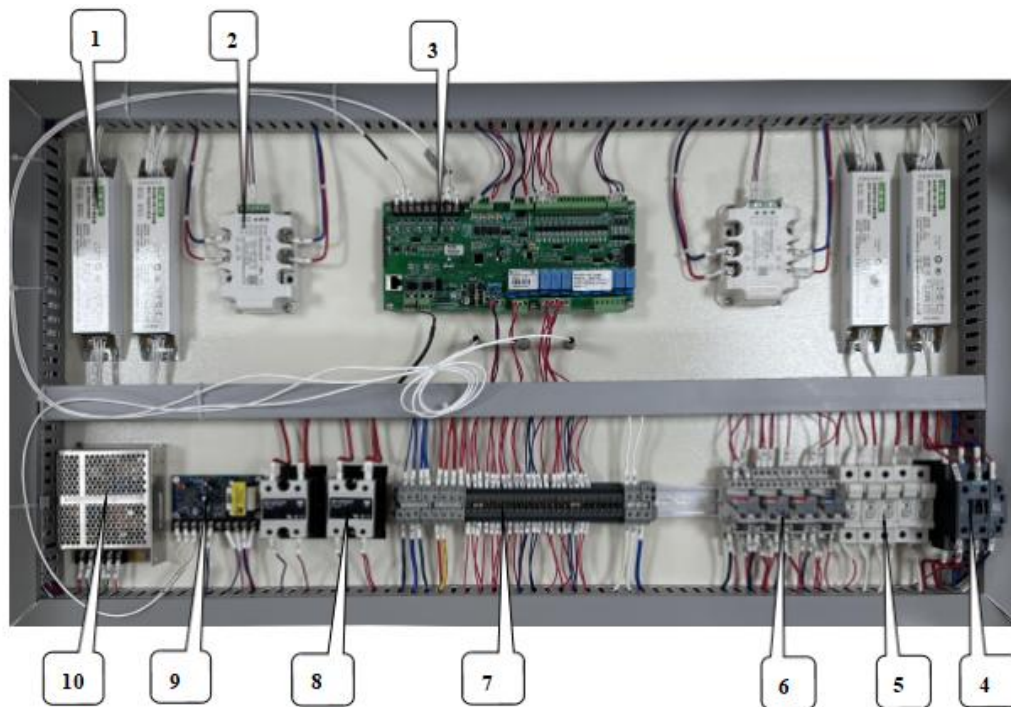
4. Water supply area



Number	Name	Illustration
1	Drain ball valve	Open the ball valve to drain water from the test area
2	High temperature fan	The heat generated by the heating tube is sent into the test area
3	Water purifier	The device filters impurities in the water when doing humidity
4	Water refill pump	After draining the filtered water from the tank, add water to the tank
5	Water tank	Store test water
6	Water supply box	Drain the water from the refill drawer into the water tank

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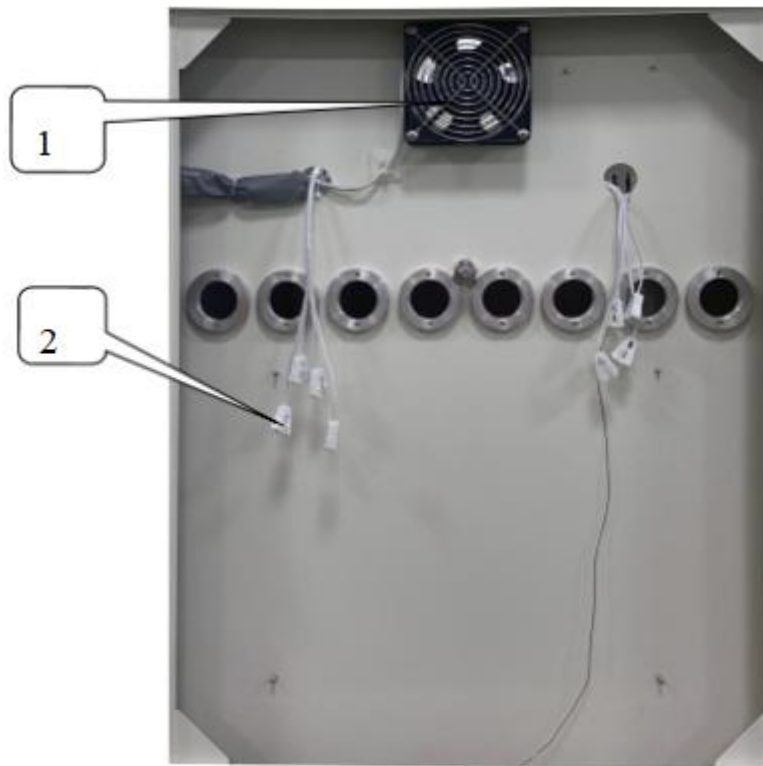
5. Power distribution room



Number	Name	Number	Name
1	Electrical ballast	6	Intermediate relay
2	Lamp control module	7	Connector terminal
3	UV controller PLC	8	Solid state relay
4	Ac contactor	9	Overheated plate
5	Fuse	10	Dc power supply

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6. Right side of the machine



Number	Name	Illustration
1	Fan	Ventilation and cooling in the distribution room
2	Lamp plug	Lamp power supply, please plug it in after replacing the lamp

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Test Report:

Temperature ° C Set value	Temperature ° C Test value	Irradiation intensity Set value	Irradiation intensity Test value	Test time
45	45	0.45	0.45	2H
50	50	0.7	0.7	2H