



电梯轿厢空气净化器

ELEVATOR CABIN AIR PURIFIER

近年来，随着房地产的蓬勃发展，新建大楼数量剧增，配套的电梯轿厢内灰尘较大，装修材料的气味较浓，成为一个相当普遍的问题。在用梯中，由于电梯轿厢相对密闭，人员密集，如何高效安全地杀死诸如流感病毒、SARS、肺结核等通过空气传播的致病源，成为电梯乘客和电梯公司亟待解决的一个问题。

紫外线可以杀死现在已知的几乎所有病毒细菌，只是对于不同的病菌有不同的杀灭时间。根据2003年中国疾病预防控制中心病毒病预防控制所专家董小平的研究发现，严重急性呼吸道症候群(SARS)冠状病毒的生存能力比原来估计要强，但是高温消毒和紫外线照射等方法，可以有效杀灭SARS。研究人员同时模拟自然条件下的日光，检测日光中紫外线对冠状病毒的杀灭能力，结果发现，在北京地区5月份上午十时的晴朗天气下，紫外线照射三小时可杀灭SARS病毒，阴天中紫外线的杀灭能力就相对下降。

国内目前电梯轿厢空气中管理中，安装紫外线杀菌装置的电梯非常少，这不是说我们的电梯不需要安装，而是我们的电梯乘客和电梯公司的认识和行动还没达到这样的重视程度。目前在国内，医梯有强制规定必须安装紫外线杀菌装置，但由于其工作时间有限，一般是电梯停运后杀菌30~60分钟，对正在使用中的轿厢空气没有起到杀菌作用，这是个重大缺陷！但恰恰也是和山电梯轿厢空气净化器的重大优点，和山净化器能在轿厢内有人乘坐的情况下连续杀菌，且又能避免紫外线对人体造成的伤害。

In recent years, with the vigorous development real estate market, the number of new buildings has increased dramatically, the dust in the supporting elevator car is large, and the smell of decoration materials is relatively strong, which has become a quite common problem. In the elevator car, because the car is relatively closed and crowded, how to effectively and safely kill airborne sources such as influenza virus, SARS, tuberculosis, etc., has become an urgent problem for elevator passengers and elevator companies.

Ultraviolet light kills almost all viral bacteria known to date, but has different killing times for different germs. According to a study by Dong Xiaoping, an expert from the Center for Viral Disease Prevention and Control of the Chinese Center for Disease Control and Prevention in 2003, the viability of severe acute respiratory syndrome (SARS) coronavirus is stronger than originally estimated, but methods such as high-temperature disinfection and ultraviolet irradiation can effectively kill SARS. The researchers simultaneously simulated daylight under natural conditions and tested the ability of ultraviolet light to kill coronavirus in sunlight. The results showed that in the sunny weather at 10 am in Beijing in May, UV rays could kill SARS for three hours, cloudy. The ability to kill ultraviolet light is relatively low.

In the current domestic air management of elevator cars, there are very few elevators equipped with ultraviolet disinfection devices. This is not to say that our elevators do not need to be installed, but the awareness and actions of our elevator passengers and elevator companies have not yet reached such importance. At present, in China, medical ladders have mandatory regulations to install ultraviolet disinfection devices. However, due to their limited working time, they are usually sterilized for 30 to 60 minutes after the elevator is stopped. This does not have a bactericidal effect on the air in use. This is a Major defect! However, it is also a major advantage of the mountain elevator car air purifier, and the mountain purifier can continuously sterilize in the case of a person riding in the car, and can avoid the damage caused by ultraviolet rays to the human body.

和山人一直致力于电梯轿厢空气温度调节，空气净化等领域的研究，在第一代TYUV系列电梯轿厢紫外线杀菌系统的基础上，与国内高校、科研机构等展开了长时间深度合作，开发了高度智能化的第二代TJHQ系列电梯轿厢空气净化器；并委托上海市疾病预防控制中心对其杀菌效率进行了检测，结果表明，作用60min后，对20m³试验室内白色葡萄球菌杀灭率为99.86%—99.90%，非常高效。

对于装修材料气味的解决，我们采用了锐钛型TiO₂纳米材料，做成光触媒涂层，在紫外光的作用下，价带上的电子（e⁻）跃迁到导带，在价带上产生相应的空穴（h⁺），生成具有极强氧化作用的超氧离子自由基、羟基自由基、超氧羟基自由基，不仅能将甲醛、苯、甲苯、二甲苯、TVOC等有毒有害气体、污染物、臭气等氧化分解成无害的CO₂和H₂O，而且具有高效广谱的消毒性能，对各种常见的致病菌都有很好的抑制和杀灭作用。一般抗菌剂只有杀菌作用，但不能分解毒素，光触媒则可以将细菌遗体及在体内残留毒素完全分解，达到彻底消毒杀菌的目的。光触媒作用过程中本身不发生变化和损耗，只是提供一个反应场所，具有持续作用、性质稳定、安全无毒的优点，不产生二次污染，是绿色环保无污染产品。

Heshan has been committed to the research of elevator cabin air temperature control, air purification and other fields. Based on the first generation of TYUV series elevator cabin UV disinfection system, Heshan launched a long deep cooperation with domestic universities, research institutions, and developed the second generation TJHQ series elevator cabin air purifier. The air purify system is tested by Shanghai Disease control and Prevention Center to be as efficient as 99.86% - 99.90 in killing white staphylococcus in 20m³ lab under 60minute radiation.

For decoration materials odor solution, we have adopted TiO₂ nanomaterials to make photocatalytic coatings, under UV effect, valence band electrons (e⁻) transitions to the conduction band, the valence band create a corresponding hole (h⁺), it will generates superoxide anion radicals with high oxidation, hydroxyl radicals, superoxide hydroxyl radicals, can not only formaldehyde, benzene, toluene, xylene, TVOC and other toxic gases, pollutants, odors and other oxidation and decomposition into harmless CO₂ and H₂O, but an efficient broad-spectrum disinfection performance of a variety of common pathogens. General antibacterial agents only bactericidal effect, but can't break down toxins, bacteria photocatalyst can be completely decomposed remains and residual toxins in the body, to achieve complete sterilization purposes. Photocatalysis process itself does not change and loss, just to provide a response place, a continuing role, stable, safe and nontoxic advantage, no secondary pollution, is green pollution-free products.



TJHQ系列空气净化器吸取了多年市场经验和技術革新成果，采用纳米光触媒技术、优质进口紫外线灯、高效过滤系统等多项先进技术，具有广谱高效、高效过滤、空气净化、智能控制、故障报警五大卓越性能。可以与电梯空调联动安装，也可以与电梯风扇联动安装，适用于医院、商场、写字楼、酒店等场所。已用于北京大兴新机场、天津市人大、上海国金中心、广东省省委、深圳坪山妇幼保健院、重庆江北机场、成都东方广场、西安莱安中心、新疆克拉玛依飞机场、银川万科城市之光、沈阳恒隆广场、山西省建行、青岛海尔董事局大楼、湖北省农村信用社联合社、南通市政府、南昌大学第一附属医院、杭州市民中心、温州市国家电网、长沙楷林国际大厦、福州融侨中心、云南省第一人民医院、昆明恒隆广场等项目，我们以专业的精神，获得了用户专业的肯定！

TJHQ series air purifiers have absorbed many years of market experience and technological innovation achievements, and adopt many advanced technologies such as nanometer photocatalyst technology, high quality imported UV lamp, and high efficiency filtration system, etc., with five outstanding performances of wide spectrum high efficiency, high efficiency filtration, air purification, intelligent control and fault alarm. It can be installed in tandem with elevator air conditioners or elevator fans. It is suitable for hospitals, shopping malls, office buildings, hotels and other places. It has been used in Beijing Daxing New Airport, Tianjin People's Congress, Shanghai International Financial Center, Guangdong Provincial Party Committee, Shenzhen Pingshan Maternal and Child Health Hospital, Chongqing Jiangbei Airport, Chengdu Oriental Plaza, Xi'an Laian Center, Xinjiang Karamay Airport, Yinchuan Vanke City Light, Shenyang Hang Lung Plaza, Shanxi Provincial Construction Bank, Qingdao Haier Board of Directors Building, Hubei Provincial Rural Credit Cooperatives, Nantong Municipal Government, Nanchang University First Affiliated Hospital, Hangzhou Civic Center, Wenzhou State Grid, Changsha Kailin International Building, For projects such as Fuzhou Rongqiao Center, the First People's Hospital of Yunnan Province, and Kunming Henglong Plaza. We have won professional affirmation from users with our professional spirit!



型号说明

Model Instructions

TJHQ-18K

1

名称

2

功率

3

类型



4

特殊代码



5

特殊代码

1. TJHQ: 电梯轿厢空气净化器
TJHQ: Elevator Cabin Air Purifier
2. 紫外线灯标称功率 (有18W和36W可选)
UV lamp power (18w or 36w)
3. F: 风机型, 自带风机, 可独立安装; K: 空调型, 与空调联动安装
F: Fan type, with fan, can be installed independently
K: Linked installation with air conditioner
4. 产品更新代数, "2" 表示第二代...
Product update generation, "2" means second generation...
5. 出(回)风方式:
B: 前面出风, 后面回风
B: Air out from front, Air return from behind

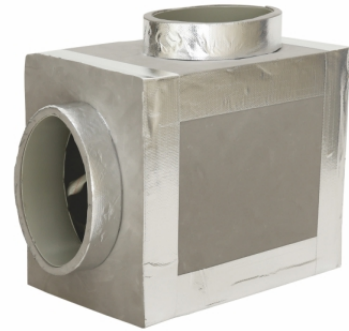


空调联动系列轿厢空气净化器

Air-conditioning Cabin Air Purifier

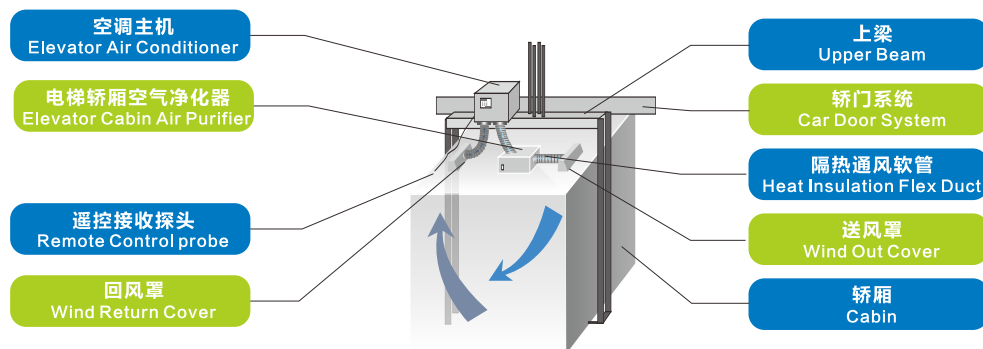
● 主要功能特点 Product Feature

- 安全可靠，电梯轿厢内有乘客时也可正常开启使用；
- 原装进口紫外线灯，杀菌迅速，效率高，杀灭率可达99.9%以上；
- 采用纳米光触媒技术，有效去除空气中的TVOC等有害物质；
- 广谱高效，属于纯物理消毒方法，无二次污染；
- 结构设计合理紧凑，安装方便；
- 使用方便，和电梯空调同步工作（非标定时器款可以独立开关机）；
- 能耗低，寿命长，有效使用时间超过9000个小时。



- Safety and reliable, It can also be opened when there are passengers in the elevator car;
- Original imported UV lamp, rapid sterilization, high efficiency, up to 99.9%;
- Using Nanometer Photocatalyst technology to effectively remove harmful substances such as TVOC in the air;
- Broad spectrum efficiency, the pure physical disinfection method, no secondary pollution;
- Reasonable and compact structure design, easy to install;
- Easy to use, work synchronously with elevator air conditioner (Non-standard timer models can be turned on and off independently) ;
- Low energy consumption, effective lamp service more than 9000 hours.

● 安装示意图 The Installation Diagram



▲ 空调联动系列

主要技术参数 Major Technical Data

| 型号 Model | 电源 Power | 额定功率 Rated Power (W) | 灯电压 Voltage (V) | 灯电流 Current (A) | 灯管有效寿命 Effective Service Time (H) | 外形尺寸(长*宽*高) Dimensions(L*W*H) (mm) | 重量 Weight (kg) | 适用电梯 For Elevator (kg) |
|-------------|-------------|----------------------------|-----------------------|-----------------------|---|--|----------------------|------------------------------|
| TJHQ-18K | 220V, 50Hz | 18 | 60 | 0.37 | 9000 | 320*190*260 | 3 | ≤1350 |
| TJHQ-36K | 220V, 50Hz | 36 | 105 | 0.44 | 9000 | 500*190*260 | 4.3 | ≤2000 |

备注：上述型号也适用于230V 60Hz电源，具体参数请以铭牌为准。

Remarks: The above models are also suitable for 230V 60Hz power supply, please refer to the nameplate for specific parameters.

风机联动系列轿厢空气净化器

Air-conditioning Cabin Air Purifier

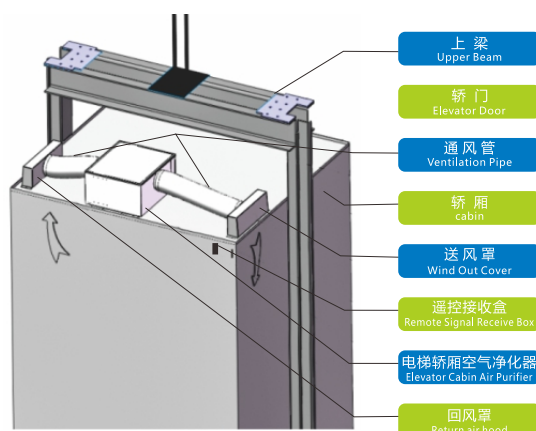
● 主要功能特点 Product Feature

- 安全可靠，电梯轿厢内有乘客时也可开启使用；
- 原装进口紫外线灯，杀菌迅速，效率高，杀灭率可达99.9%以上；
- 采用纳米光触媒技术，有效去除空气中的TVOC等有害物质；
- 高效的过滤系统：采用初效和含活性炭的HEPA高效过滤网，2.5 μ m颗粒物过滤效率达到99.5%以上；
- 广谱高效，属于纯物理消毒方法，无二次污染；
- 结构设计合理紧凑，安装方便，电源独立控制；
- 使用方便，可在轿厢内遥控操作，也可设置定时自动运行；
- 轿厢内有显示面板，对运行状态，故障报警等进行监测；
- 能耗低，寿命长，有效使用时间超过9000个小时。

- Safety and reliable, It can also be opened when there are passengers in the elevator car;
- Original imported UV lamp, rapid sterilization, high efficiency, up to 99%;
- Using Nanometer Photocatalyst technology to effectively remove harmful substances such as TVOC in the air;
- High-efficiency filtration system: the primary effect and HEPA high-efficiency filter with activated carbon are used, and the filtration efficiency of 2.5 μ m particulate matter is above 99.5%;
- Broad spectrum efficiency, the pure physical disinfection method, no secondary pollution;
- Reasonable and compact structure design, easy to install, independent power control;
- Easy to use, can be operated remotely in the car, and can also be set to run automatically at a time;
- There is a display panel in the car to display the running state, fault alarm and so on;
- Low energy consumption, effective lamp service more than 9000 hours.

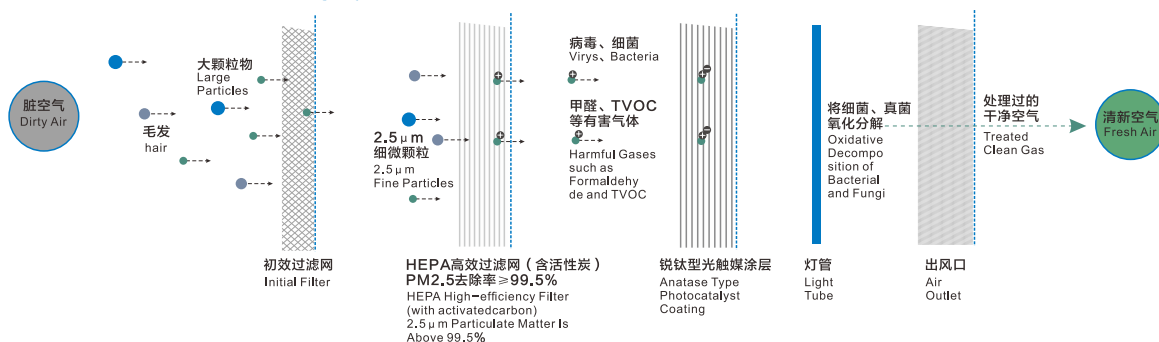


▲ B款



▲ 风机联动系列

● 高效的过滤系统 Filtering System



主要技术参数 Major Technical Data

| 主机型号 Model | 电源 Power | 额定输入功率 Rated Power (W) | 风量 Air flow (m ³ /h) | 灯电压 Voltage (V) | 灯电流 Current (A) | 灯管有效寿命 Effective Service Time (H) | PM _{2.5} 去除率 Removal rate of PM _{2.5} | 噪音 Noise dB(A) | 外形尺寸(长*宽*高) Dimensions(L*W*H) (mm) | 重量 Weight (kg) | 适用电梯 For Elevator (kg) |
|---------------|-------------|---------------------------|------------------------------------|--------------------|--------------------|--------------------------------------|--|-------------------|---------------------------------------|-------------------|---------------------------|
| TJHQ-18F2B | 220V, 50Hz | 105 | 330 | 60 | 0.37 | 9000 | $\geq 99.5\%$ | <55 | 380*270*230 | 10 | ≤ 1350 |
| TJHQ-36F2B | 220V, 50Hz | 130 | 380 | 105 | 0.44 | 9000 | $\geq 99.5\%$ | <55 | 400*460*230 | 13 | ≤ 2000 |

备注：上述型号也适用于230V 60Hz电源，具体参数请以铭牌为准。

Remarks: The above models are also suitable for 230V 60Hz power supply, please refer to the nameplate for specific parameters.