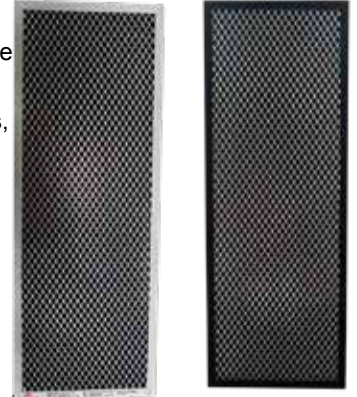


EV Charging Protection Filter WSE-S

Product Features

The Whalesens EV Charging Protection Filter (WSE-S) series is an ultra-thin, washable, high-performance air filter specifically designed for new energy vehicle charging stations. It aims to balance heat dissipation efficiency and filtration precision, providing reliable dust protection, water splash resistance, and flame retardancy for the sensitive electronic components of outdoor charging stations, significantly reducing operational maintenance costs and extending equipment lifespan.



Core Advantages

Cost-effective & Reusable: Features a unique washable design. When clogged, it can be cleaned with a vacuum cleaner or rinsed with clean water. After drying, its performance is restored, enabling repeated use and greatly reducing long-term replacement costs.

Dual-Layer Composite Protection:

1. Open-cell foam layer (10–100 PPI): Effectively intercepts and captures larger particles such as dust, pollen, catkins, and insects from the air.
2. High-efficiency moisture barrier: Resists water splashes and prevents moisture ingress, protecting internal electronic components.

Ultra-thin & Compatible Design: Aluminum alloy one-piece frame with a thickness of only 7 mm, specifically designed for space-constrained charging stations. Dimensions can be customized for easy installation without modifying existing equipment.

Multi-Level Safety & Flame Retardancy: The product complies with UL94 HF-1 flame rating, and can also meet UL900 standards based on customer requirements, ensuring safety under extreme conditions and meeting market access requirements in different regions.

Low Airflow Resistance: Optimized for the heat dissipation needs of charging stations, ensuring sufficient cooling airflow to prevent overheating that could trigger power derating.

Material characteristics

Filter Media: Polyurethane (PU) open-cell foam

Activated Carbon Option: Powdered activated carbon (wood-based/coal-based/coconut shell), carbon content $\geq 50\%$, benzene adsorption $\geq 20\%$

Dimensions: 100*200 cm, 120*200 cm

Thickness: 3–100 mm

Porosity (PPI): 10 PPI, 20 PPI, 30 PPI, 35 PPI, 40 PPI, 45 PPI, 50 PPI, 60 PPI, 100 PPI, etc. (selectable based on filtration requirements)

Initial Resistance: For example, with 10 mm thickness and 30 PPI media, at an air velocity of 1.0 m/s, resistance ≤ 35 Pa

Technical Parameter

Model	WSE-S
Filter Media	Polyurethane (PU) open-cell foam (powdered activated carbon optional)
Filtration Precision	Effectively captures particles > 5 microns
Thickness	7 mm (customizable), Compatible with mainstream models such as ABB, Tesla, Star Charge, etc.
Frame Material	Aluminum alloy / Galvanized steel sheet (optional)
Flame Rating	Media and finished products can comply with UL94 HF-1 or UL900 standards based on project requirements
Cleaning & Maintenance	Washable with water or cleanable with vacuum cleaner; recommended interval 3–6 months (depending on environment)

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