

SPECIFICATION

Product Name: Automobile Negative Ion Generator

Item No.: AAG- 1000

Version: V0. 1

Date: 2019- 11-22

Revision

No.	Version	Content	Revision	Date
1	V0.1	Preliminary Version	Mei Yang	2019-11-22

Automotive Negative Ion Generator

AAG- 1000



Application

- Automotive
- Air Purifier
- Air conditioning with purifying function
- HVAC equipment
- Refrigerator
- Disinfection cabinet

Description

AAG- 1000Automotive Negative Ion Generator is a device to generate negative air ions,its release tip is made of DC negative high pressure carbon.

The high corona generated by the high DC voltage at the tip increases the negative ion components in the air, to absorb and settle the positively charged suspended particles in the air and other harmful substances, such as viruses, bacteria, formaldehyde, etc., which plays the role of refreshing the air, removing smoke & dust and killing bacteria, finally creates a better environment.

Features

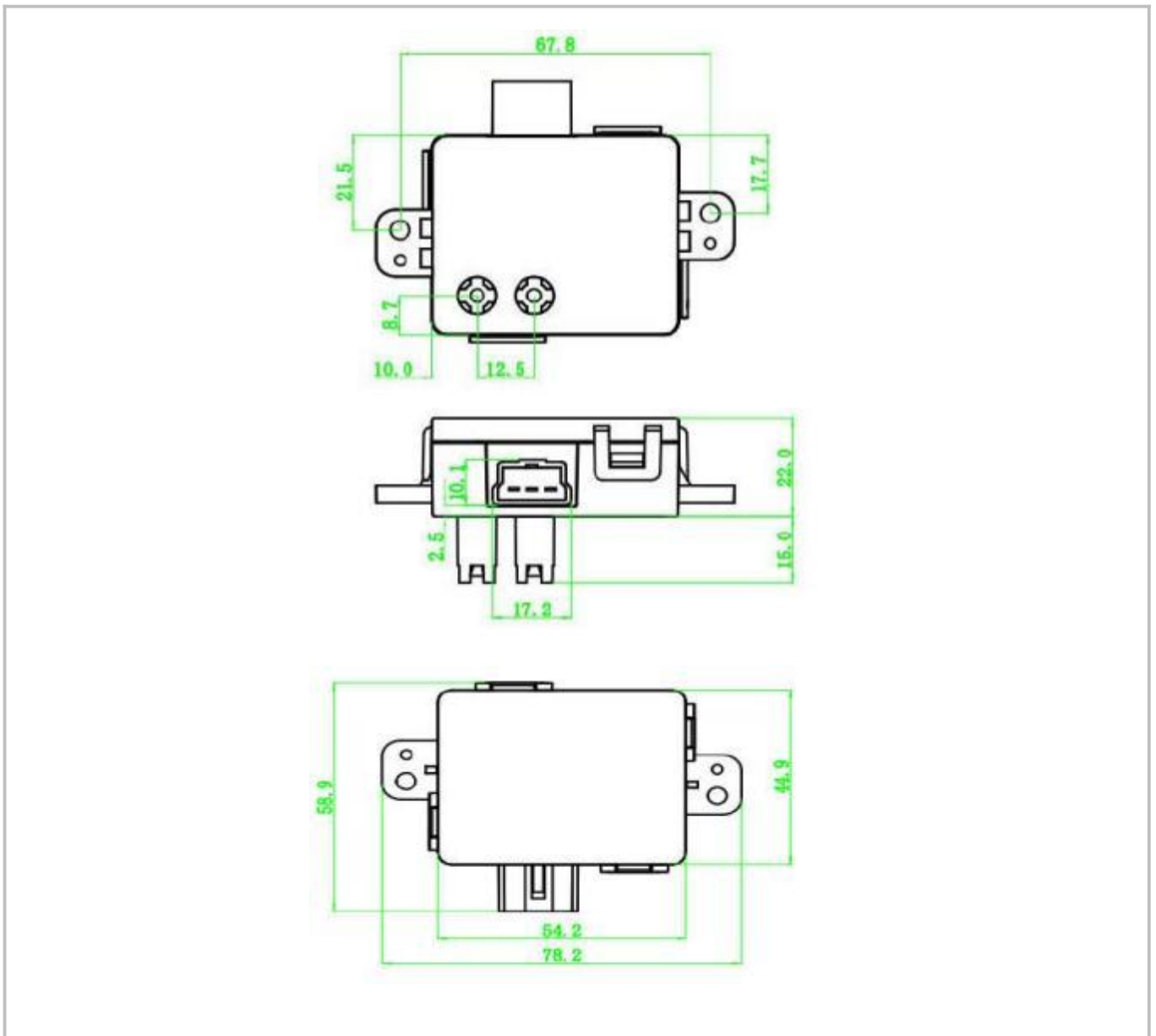
- Built-in integrated circuit, with circuit protection device, take electricity more stable.
- Adopt High efficient carbon fiber anion release tip.
- Compact appearance,save the car space;
- All electronic components meet the AEC-Q standards

Working Principle

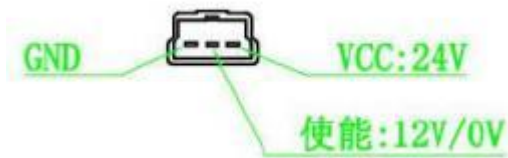
Ions use pulse and oscillating electrical appliances to raise the low voltage to DC negative high voltage through the negative ion generator, use the carbon brush tip DC high voltage to generate high corona, and release a large number of electrons (e-) at high speed. Electrons cannot exist in the air for a long time (the lifetime of the existing electrons is only nS level), and will be immediately captured by the oxygen molecules (O₂) in the air to form negative (oxygen) ions.

Dimensions and Connector

1. Dimensions (Unit mm)



2.Pin Definition



No.	Pin	Description
1	VCC	Power Input (24V)
2	GND	Power Input(ground)
3	EN	EN(12V/0V)

Specification

General Performance	
N-ion concentration	$\geq 3 \times 10^6$ pcs/cm ³
Ozone concentration	≤ 0.05 ppm
Product Size	67.8*44.9*22.0 mm
Electrical	
Supply Voltage	21V ~27V (Rated voltage 24 VDC)
Working current	≤ 30 mA
The static current	≤ 2 mA
Output High-voltage	DC: -3.5 ± 0.5 KV (1G)
Protective impedance	20 ± 2 MQ
Insulation resistance	≥ 3750 V
Over voltage performance	≤ 36 V
Circuit protection	Input end reverse connection protection (Use DC regulated power supply reverse access 28V voltage for 1 minute, the product is normal (Refer to ISO16750-2 standard))
Control of working	EN control is enabled or disabled (If 12V is input to the enable end, the product is started. Input 0V or hang to close the product)

Precautions

1. This product is generally used in low-power situations, and cannot provide a driving source for power-type high-voltage products.
2. The release tip of the negative ion generator is equipped with an internal protection resistor. When the human body touches the release end inadvertently, there will be a slight feeling of acupuncture and electric shock, which will not cause harm to the human body. However, considering everyone's sensitivity to pressure, it is recommended not to touch the release tip under the condition of electric work.
3. The negative ion release tip is high voltage output, and there should be no shielding around the application to avoid the unstable phenomenon of negative ion release.
4. The principle of negative ion release is air release, unable to produce release effect in water or other media.
5. The internal of the negative ion generator is a high-frequency oscillation circuit. If there are multiple negative ions working at the same time, it is recommended to install them separately to avoid mutual interference between products.

After-Sales Services and Consultancy

Cubic Sensor and Instrument Co.,Ltd.

Tel: +86 (0)27 81628827 Fax: +86 (0)27 81628821

Add: Fenghuang No.3 Road, Fenghuang Industrial Park,
Eastlake Hi-tech Development Zone, Wuhan 430205, China

E-mail: info@gassensor.com.cn