Compact size of 150 × 166 × 62 mm
(5.906 × 6.535 × 2.441 in)
Low-volume fan type also available for various applications

Standard fan type
ER-F12

Low-volume fan type
ER-F12S

Two exchangeable louvers to suit your needs

- Just simply replace the louver to change configuration between long distance and wide area ionization.
- The two louvers come with the ionizer main body.

- An ionizer with a 120 mm 4.724 in fan diameter that has a class leading compact size for reducing workbench clutter and increasing efficiency.
- Low-volume fan type with a suppressed fan speed of approx. half is available for charge removal in processes which involve handling of small parts or thin films.

* Graphs represent typical values at 300mm 11.811 in from directly in front of air outlet, straight louver, with no filter installed.

Remove the louver for effortless maintenance

- Because the discharge needle unit is attached to the louver, exchange or maintenance of the needles is made easy without touching the main unit.
- A safe design where once the louver is removed, the high-voltage circuit and the fan will halt.
**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Type</th>
<th>Standard fan type</th>
<th>Low-volume fan type</th>
</tr>
</thead>
<tbody>
<tr>
<td>ER-F12</td>
<td></td>
<td></td>
<td>ER-F12S</td>
</tr>
</tbody>
</table>

- **Charge removal time**: 1 sec. approx. (Note 1) 1.5 sec. approx. (Note 1)
- **Ion balance**: ±10 V or less (Note 2)
- **Power supply voltage**: 24 V DC ±10%
- **Power consumption**: 700 mA or less 400 mA or less
- **Discharge method**: High-frequency AC method
- **Discharge output voltage**: ± 2 kV approx.
- **Max. fan speed**: 5.3 m/s (Note 2) 4.0 m/s (Note 2)
- **Max. fan volume**: 3.68 m³/min 2.50 m³/min
- **Main functions**: Error output, Discharge halt input
- **Indicators**: Discharge error (Red), Fan error (Red), Power (Green), Discharge (Green)
- **Ozone generation amount**: 0.04 ppm or less (Note 1)
- **Ambient temperature**: 0 to +50°C 32 to 122°F (No dew condensation) / Storage: -10 to +65°C 14 to 149°F
- **Ambient humidity**: 35 to 65% RH (No dew condensation) / Storage: 35 to 65% RH
- **Grounding method**: C (capacitor) grounding
- **Material**: Enclosure: ABS, Louver: ABS, Discharge needle unit: PBT, Discharge needle: Tungsten, Bracket: SPHC
- **Weight**: Main unit: 790 g approx.
- **Accessories**: Straight louver: 1 pc. (Note 3), Angle louver: 1 pc., Caution label: 1 set, Rubber cushion: 1 pc.

Notes:
1. Typical value at 200 mm 7.874 in from directly in front of air outlet, fan speed MAX, straight louver, with no filter installed.
2. Typical value at 300 mm 11.811 in from directly in front of air outlet, fan speed MAX, straight louver, with no filter installed.
3. The discharge needle unit is loaded on the straight louver before shipment.

**DIMENSIONS (Unit: mm in)**

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**CHARGE REMOVAL CHARACTERISTICS (TYPICAL)**

Measured using a 150 mm 5.906 in CPM (charge plate monitor) (At center of CPM)

* Solid lines in the graphs show ER-F12. Dotted lines show ER-F12S.

**OPTIONS**

- **ER-FAPS-J2, ER-FAPS-EX (Note) / AC adapter**
  - IN: 100 to 240 V AC 50 / 60 Hz  • OUT: 24 V DC, 2.0 A
  - Cable length between connector and AC adaptor: 1.8 m 5.905 ft
  - AC cable: 125 V rated (an accessory to ER-FAPS-J2 only)

- **ER-F12ANT / Discharge needle unit**
  Unit with tungsten needles (1 pc.)

- **ER-F12FX5 / Air filter**
  Replacement filter (5 pcs. per set)

**PRECAUTIONS FOR PROPER USE**

- This product does not possess control functions for safety assurance such as accident prevention.
- This product has been developed / produced for industrial use.
- Do not use this product in places where there may be a danger of flammable or combustible items being present.
- If this product is used in an airtight room, ozone emitted from this product may be detrimental. Therefore, in order for this product to be used in an airtight room, be sure to keep the room ventilated.
- Since the tip of the discharge needle is sharp, take sufficient care in handling the discharge needle.
- Clean the discharge needle regularly, otherwise optimum charge removal performance may not be obtained and fire or operating problems may occur.
- Be sure to ground the frame ground (F.G.) terminal.

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All information is subject to change without prior notice.