

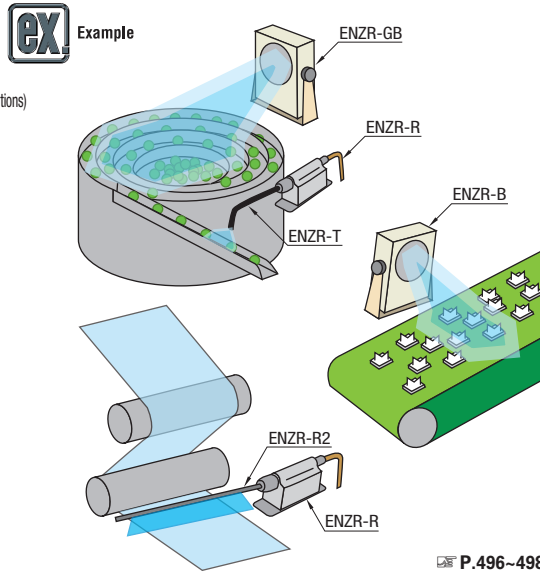
# Ionizers

## Overview

### Overview

Ionizers (neutralization equipment) are available with short lead time as antistatic measures for FA applications. Ionizers can continuously neutralize non-conductive insulating materials with small environmental influence.

Newly added products are: 2 Kinds of Fan Type (Medium-sized/Compact) capable of neutralizing wide range/long distance; 1 Nozzle Type capable of spot neutralization and with compact design for easy installation at any desired locations; and 3 kinds of Attachments for Nozzle Type.



### Characteristics of Medium Size DC Fan Type (ENZR-GB)

- 0.6 second of super high speed neutralization is realized by 8 electrode pins and large air volume. (Under the following conditions)
- Maximizing the range of wind velocity realized slight wind and high speed neutralization.

Neutralization Property Data by Wind Velocity

Wind Velocity	Static Neutralization Time
Max. 4.6m/sec	0.6 sec.
Min. 1.3m/sec	1.8 sec.

Measured Distance 300mm

- Covers the wide range of area equivalent to 3 pieces of IC tray.
- Fan guard can be removed by one-touch sliding, resulting in saved maintenance time.

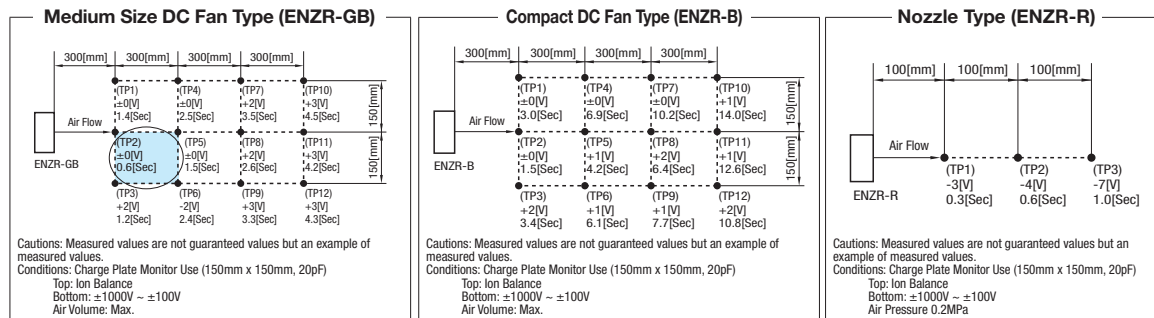
### Characteristics of Compact DC Fan Type (ENZR-B)

- Single high voltage transformer generates both positive and negative high voltages. Concerns for reverse charging with a failed transformer are eliminated.
- The extra small design enables installations on the table and in manufacturing equipments.

### Characteristics of Nozzle Type (ENZR-R)

- For its compact design, it can be installed in narrow places inside various kinds of equipments.
- High Frequency AC Type capable of stable high speed neutralization for a long time.
- Air consumption is little, stable ion balance is achieved and the running cost is low.
- Attachments can be installed when desired.

### Ion Balance and Neutralization Properties



### Precautions for Use of Ionizers

- Neutralization results vary substantially depending on installation distance, angle, air volume (Fan Type) and air pressure. Please ensure the neutralization results before use.
- Periodical maintenance is necessary. Dirty electrode pins and surroundings may lower the performance or cause displacement of ion balance. Maintenance period may vary depending on the operating environment. Utilize the cleaning lamp as a guide.

### See "Ionizer Free Consignment Sample Service".

MISUMI provides a free sample consignment service catered for various customer needs.



#### ① A "Rental Only" unit is consigned.

Rental Only Unit can be tested in customer's condition of use. Consignment Ordering Method: Add "-R" after the product name.

#### ② Static Charge Sensor Consignment

Neutralization effects can be verified numerically by Static Charge Sensor. Consignment Ordering Method: Order with the part number "ENZR-S-R".

\* AC adaptors are not included. Order AC adaptors when required.

\* Models available for consignment: ENZR-GB, ENZR-B, ENZR-R, ENZR-BAC, ENZR-T, ENZR-R1, ENZR-R2  
 Consignment may be unavailable when "Rental Only" units are in the Rented state.

\* Orders are accepted by 17:00. Shipped on the next business day (Excluding Sat./Sun./Holidays).

\* 10 days rental period. To return the units, follow the instruction in the document included in the package.

\* The return shipping charge to be paid by the customer. (Retain a copy of shipping bill of lading.)

\* For the details of this service, see <http://fa.misumi.jp/se/>. Ionizer product manual is available for download also.

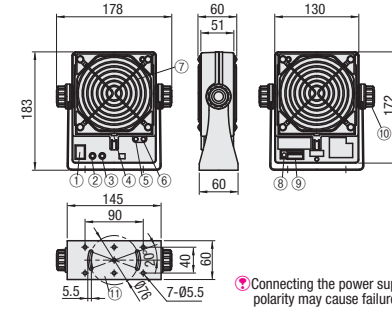
# Ionizers

## Medium Size DC Fan Type / Compact DC Fan Type / Nozzle Type

### Medium Size DC Fan Type



#### ENZR-GB



- Part Name
- Power Switch
  - Error Indicator
  - Cleaning Lamp
  - Fan Guard Stopper
  - Air Volume Controller
  - Ion Balance Controller
  - Fan Guard
  - Power Connector (for AC Adapter)
  - Terminal Block
  - Angle Adjuster Knob
  - Stand

Material Main Body Case: ABS  
 Stand: SUS304  
 Fan Guard: SUS304

Connecting the power supply in reversed polarity may cause failures.

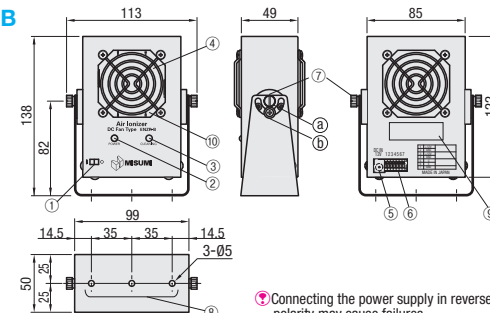
Part Number	Unit Price	Volume Discount Rate
ENZR-GB	1 pc.	2 3-5

- AC adaptors are not included. Please purchase optional ENZR-BAC.
- AC Adapter P497
- For orders larger than indicated quantity, please check with WOS.

### Compact DC Fan Type



#### ENZR-B



- Part Name
- Power Switch
  - Power Lamp
  - Cleaning Lamp
  - Ionizing Fan
  - Power Supply Connector (Input)
  - Terminal Block
  - Angle Adjuster Knob (temporary joint by a, fix by b)
  - Mounting Holes
  - PL Label
  - Electrode Pin

Material Main Body Case: A5052P (Melanin Baked Paint)  
 Stand: SPCC (Melanin Baked Paint)  
 Fan Guard: SUS304

Connecting the power supply in reversed polarity may cause failures.

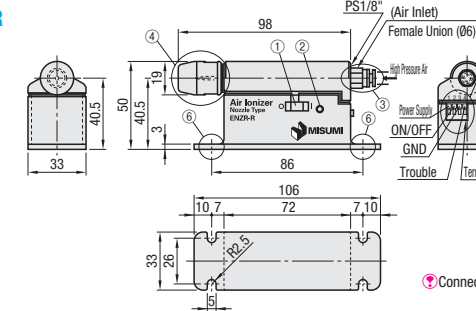
Part Number	Unit Price	Volume Discount Rate
ENZR-B	1 pc.	2 3-5

- AC adaptors are not included. Please purchase optional ENZR-BAC.
- AC Adapter P497
- For orders larger than indicated quantity, please check with WOS.

### Nozzle Type



#### ENZR-R



\*Ø6 air tube can be installed.

- Part Name
- Power Switch
  - Operation-Warning Lamp
  - Air Inlet
  - Ion Generator (Metal Cap)
  - Terminal Block
  - Mounting Holes

Connecting the power supply in reversed polarity may cause failures.

Part Number	Unit Price	Volume Discount Rate
ENZR-R	1 pc.	2 3-5

- Cap can be removed and replaced with an optional nozzle attachment.
- AC adaptors are not included. Please purchase optional ENZR-RAC.
- AC Adapter P497
- Attachment P497
- For orders larger than indicated quantity, please check with WOS.

### Ionizers Specifications

	ENZR-GB	ENZR-B	ENZR-R
Ionizing Method	DC Corona Discharge	DC Corona Discharge	High Frequency Corona Discharge
Discharge Electrode Pin	Tungsten	Tungsten	-
Air Volume	Fan Speed: Non-Step Variable, Maximum Air Volume: 3.68m <sup>3</sup> /min, Wind Velocity: 1.3 ~ 4.8m/Sec (Measured Distance: 300mm)	Fan Speed: Fixed, Air Volume: 0.65m <sup>3</sup> /min, Wind Velocity: 1.31m/Sec (Measured Distance: 300mm)	Recommended Air Pressure: 0.1 ~ 0.4 MPa, Air Consumption: 55 ~ 155L/min (ANR)
Alarm Display/Output	Alarm Display Cleaning, Fan Error, Fan Guard Removed, High Voltage Halted	Alarm Output Cleaning Indicator, High Voltage Halted, Panel LED Red ON	Alarm Output Dirty Electrode, High Voltage Halted, Strain Relief Removed, Panel LED Red ON
Terminal Block	DC24V Input, DC24V Output (Connectable in series up to 5 units), Cleaning Indicator (includes High Pressure Alarm), Buzzer Output (DC24V), Error Indicator (includes Fan Guard Open Alarm), Grounding	DC24V Input, DC24V Output, Alarm Output, Grounding	DC 24V Input, Neutralization ON/OFF, Alarm Output, Grounding
Ozone Generation Amount	0.02 ppm or Less (Measured Distance 300 mm)	0.02 ppm or Less (Measured Distance 300 mm)	0.02 ppm or Less (Measured Distance 300 mm)
Environment	0 ~ 40°C, 80% RH or Less (No Condensation)	0 ~ 40°C, 80% RH or Less (No Condensation)	0 ~ 40°C, 80% RH or Less (No Condensation)
Power Input	DC24V (Dedicated AC Adaptor or Terminal Block)	DC24V (Dedicated AC Adaptor or Terminal Block)	DC24V
Consumption Current	550mA	220mA	110mA
Mass	Approx. 900g	Approx. 510g	Approx. 150g

