

## The highest level of ionization in its class.



- Sensing and variable-AC system provides fast and meticulous ionization.
- Linked Ionizers cover a wide area without causing uneven ionization.
- Digital ion display provides simple and reliable settings.

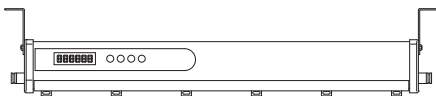


For the most recent information on models that have been certified for safety standards, refer to your OMRON website.

Refer to *Safety Precautions* on page 4.

## System Configuration

### Ionizer ZJ-BAS



### I/O Cable ZJ-BAS-FC

Used for connecting external devices.



### Power supply cable

Select from the two available types.

- Cable with Connector on One End**  
ZJ-BAS-MC□□A
- Cable with Connectors on Both Ends**  
ZJ-BAS-MC□□B

Used when using a DC power supply. Used when using an AC adapter.



### AC Adapter ZJ-BAS-PS01

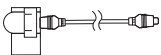


### Special Remote Control

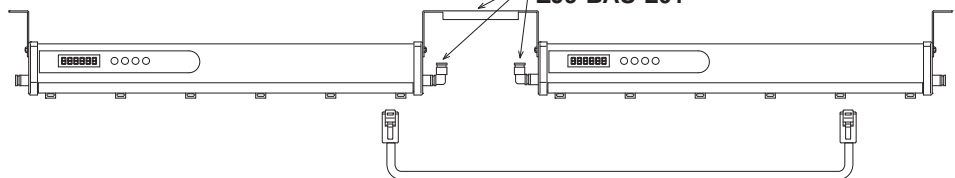
Remote Control  
ZJ-BAS-R01



Remote Control Receiver  
ZJ-BAS-R02



### When Linking Ionizers




### Linking Bracket Set ZJ9-BAS-L01

### Power Supply Cable (for linking ionizers) ZJ-BAS-MC□□RB




The length of the cables that can be linked depends on the number of ionizers to be linked together. Contact your OMRON sales representative for details.

## Ordering Information


### Ionizer

Appearance	Total length	Effective length	Model
	370 mm	500 mm	ZJ-BAS050
	450 mm	580 mm	ZJ-BAS058
	610 mm	740 mm	ZJ-BAS074
	770 mm	900 mm	ZJ-BAS090
	1,170 mm	1,300 mm	ZJ-BAS130
	1,410 mm	1,540 mm	ZJ-BAS154


### Power Supply Cable

Appearance	Type	Cable length	Model
	Cable with Connector on One End (one ferrite core provided, 30-dia × 39 mm)	2 m	ZJ-BAS-MC02A
		5 m	ZJ-BAS-MC05A
		10 m	ZJ-BAS-MC10A
		15 m	ZJ-BAS-MC15A
		20 m	ZJ-BAS-MC20A
	Cable with Connectors on Both Ends (one ferrite core provided, 30-dia × 39 mm)	2 m	ZJ-BAS-MC02B
		5 m	ZJ-BAS-MC05B
		10 m	ZJ-BAS-MC10B
		15 m	ZJ-BAS-MC15B
		20 m	ZJ-BAS-MC20B
	Used for connecting ionizers	710 mm	ZJ-BAS-MC07RB
		790 mm	ZJ-BAS-MC08RB
		950 mm	ZJ-BAS-MC09RB
		1,110 mm	ZJ-BAS-MC11RB
		1,510 mm	ZJ-BAS-MC15RB
		1,750 mm	ZJ-BAS-MC17RB



### I/O Cable

Appearance	Cable length	Model
	2 m	ZJ-BAS-FC02A
	5 m	ZJ-BAS-FC05A
	10 m	ZJ-BAS-FC10A
	15 m	ZJ-BAS-FC15A
	20 m	ZJ-BAS-FC20A


### AC Adapter

Appearance	Specifications	Model
	Input: 100 to 240 VAC Output: 24 VDC × 2	ZJ-BAS-PS01


### Special Remote Control

Appearance	Type	Model
	Remote Control	ZJ-BAS-R01
	Remote Control Receiver (Receiver, USB cable, bracket)	ZJ-BAS-R02

### Linking Bracket Set

Appearance	Contents	Model
	Linking Bracket (1) 6-dia. Elbow Air Joint (×2)	ZJ9-BAS-L01

## Discharge Electrode Module

Appearance	Quantity	Model
	Set of 5	ZJ9-BAS-NT105
	Set of 10	ZJ9-BAS-NT110

## Ratings and Specifications

### Ionizer

Item	Model	ZJ-BAS050	ZJ-BAS058	ZJ-BAS074	ZJ-BAS090	ZJ-BAS130	ZJ-BAS154
Ionizer length (mm)		370	450	610	770	1,170	1,410
Effective ionization length (mm) *1		500	580	740	900	1,300	1,540
Power supply voltage	24 VDC $\pm$ 10%, ripple (p-p) 10% max.						
Current consumption	520 mA max. (discharge frequency 0.08 to 0.5 Hz: 400 mA (typical), 1 to 10 Hz: 350 mA (typical), 20 to 40 Hz: 300 mA (typical))						
Discharge method	Sensing and a Variable-AC System						
Discharge voltage	6.5 kV P-P						
Discharge electrode	Tungsten electrode						
Recommended installation distance	50 to 2,000 mm						
Ion balance *2	$\pm$ 30 V max.						
Power supply connector	Modular type, 8-pin connector (at both ends of Unit)						
Air inlet	6-dia one-touch coupling (at both ends of Unit)						
Maximum air pressure	0.3 MPa max.						
External I/O	Input	Discharge stop input (Turns ON at 12 to 24 VDC), input impedance: 8.2 k $\Omega$					
	Output	Discharge stop output, cleaning output, alarm output, high-pressure error output: Signal output from photo MOS relay (100 mA max at 24 VDC)					
Display	Seven-segment LED display						
ID number	001 to 050						
Ion balance adjustment function	Yes						
Maximum number of linkable units	7 Units						
Material	Ionizer: ABS-resin, facing electrodes: Stainless steel						
Ambient temperature range	Operating: 10 to 40°C, Storage: 0 to 40°C (with no icing or condensation)						
Ambient humidity range	Operating: 35% to 65%, Storage: 35% to 85% (with no condensation)						
Weight (ionizer only)	Approx. 0.58 kg	Approx. 0.64 kg	Approx. 0.8 kg	Approx. 0.94 kg	Approx. 1.28 kg	Approx. 1.5 kg	
Accessories	Two mounting brackets, two M4 screws, instruction manual					Two mounting brackets, two M4 screws, 1 medium bracket, instruction manual	

\*1. Measurement conditions  
 Installation distance: 50 mm  
 Airflow: 1 L /min per hole  
 Frequency: 10 Hz  
 Charge plate monitor: 150 × 150 mm, 20 pF  
 Ionization time: (1,000 V $\rightarrow$ 100V/-1,000V $\rightarrow$ 100V): 1 s max.)

\*2. Measurement conditions  
 Installation distance: 300 mm  
 Airflow: 1 L /min per hole  
 Frequency: 10 Hz  
 Charge plate monitor: 150 × 150 mm, 20 pF

### AC Adapter

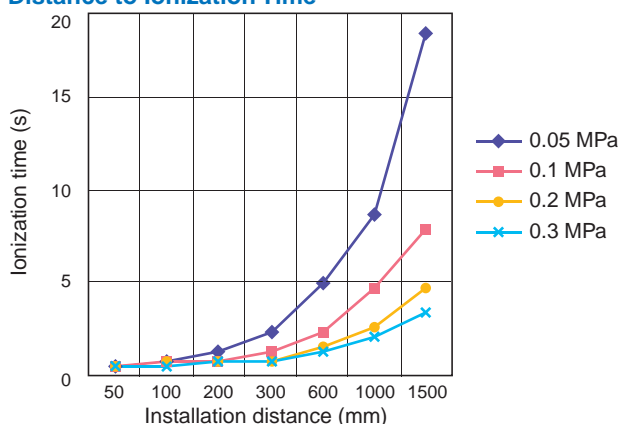
Item	Model	ZJ-BAS-PS01
Input voltage		100 to 240 VAC
Input current		1.2 A max.
Output voltage		24 VDC
Output current		3.75 A max.
Number of output ports		2 ports
Product configuration		Adapter box, AC adapter AC power cable
Weight (without package)		Adapter box: Approx. 30 g AC Adapter: Approx. 430 g AC power supply cable: Approx. 260 g

### Special Remote Control

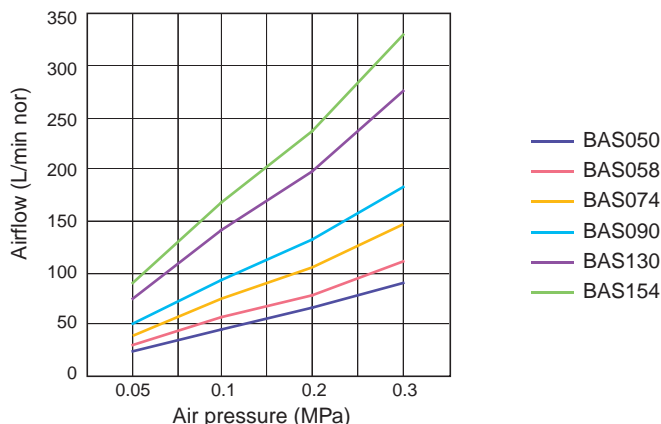
Item	Model	ZJ-BAS-R01	ZJ-BAS-R02
Product configuration		Remote Control only	Receiver Cable (150 mm) Brackets (not including Remote Control)
Communications method		Infrared communications	
Number of detectable Units		50 Units	-
Power supply		Three AAA batteries	Supplied from the ZJ-BAS Ionizer
Weight (not including packaging)		Approx. 115 g	Receiver: Approx. 5 g Cable: Approx. 6 g Bracket: Approx. 5 g
Accessories		Instruction manual	

## Engineering Data (Reference Value)

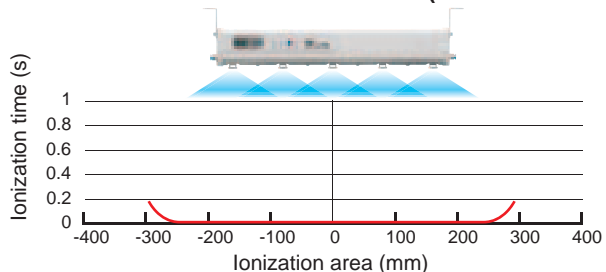
Relationship of Air Pressure and Installation Distance to Ionization Time



Bar Length vs. Air Pressure and Airflow

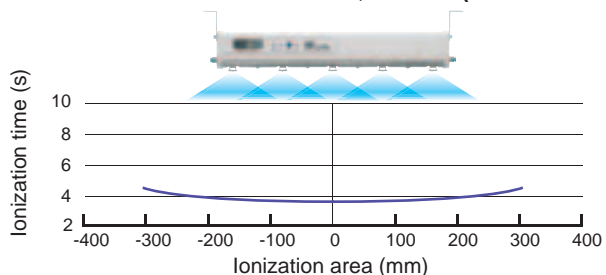


Ionization Time for Each Ionization Area  
With installation distance of 50 mm (reference value)



Measuring conditions:  
 Model: ZJ-BAS050  
 Installation distance: 50 mm  
 Air pressure: 0.3 MPa  
 Frequency: 10 Hz  
 Charge plate monitor: 150 mm × 150 mm, 20 pF  
 Ionization time: ±1,000 V to ±100 V

With installation distance of 1,500 mm (reference value)



Measuring conditions:  
 Model: ZJ-BAS050  
 Installation distance: 1,500 mm  
 Air pressure: 0.3 MPa  
 Frequency: 10 Hz  
 Charge plate monitor: 150 mm × 150 mm, 20 pF  
 Ionization time: ±1,000 V to ±100 V

## Safety Precautions

**⚠ WARNING**

This product is not designed or rated for ensuring safety of persons either directly or indirectly. Do not use it for such purposes.



**Precaution for Correct Use**

Do not use the product in atmospheres or environments that exceed product ratings.

**This document provides information mainly for selecting suitable models. Information such as the usage precautions is not contained herein. Be sure to read the instruction manual before using the product.**

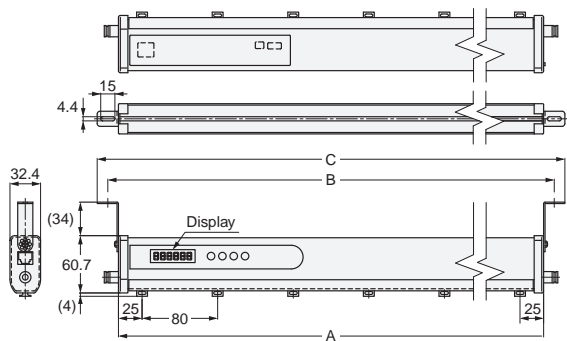
For technical information and product FAQs, refer to the *Technical Guide* on your OMRON website.

## Dimensions

Tolerance class IT16 applies to dimensions in this data sheet unless otherwise specified.

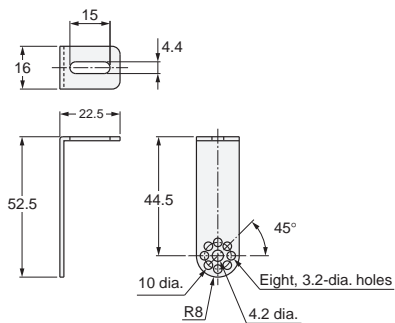
### Ionizer

The dimensions and number of Discharge Electrode Modules for each model are shown in the following table.

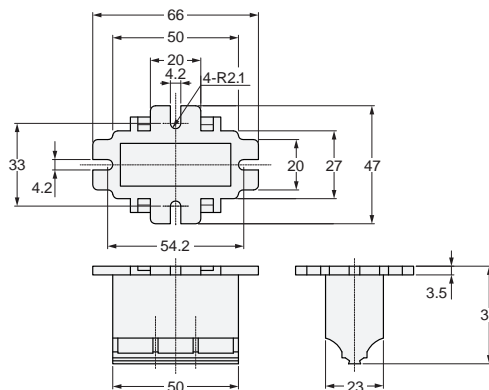


Model	A (mm)	B (mm)	C (mm)	Discharge Electrode Module
ZJ-BAS050	370	394	416	5
ZJ-BAS058	450	474	496	6
ZJ-BAS074	610	634	656	8
ZJ-BAS090	770	794	816	10
ZJ-BAS130	1,170	1,194	1,216	15
ZJ-BAS154	1,410	1,434	1,456	18

### Mounting bracket

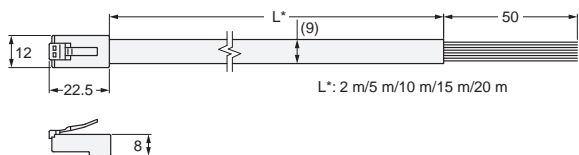


### Auxiliary mounting bracket Provided with the ZJ-BAS130/BAS154

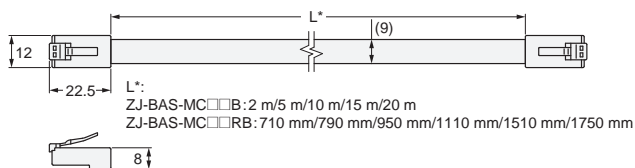


### Power Supply Cable

#### ZJ-BAS-MC□□A

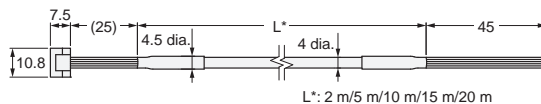


#### ZJ-BAS-MC□□B/MC□□RB



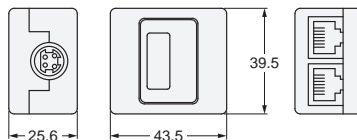
### I/O Cable

#### ZJ-BAS-FC□□A

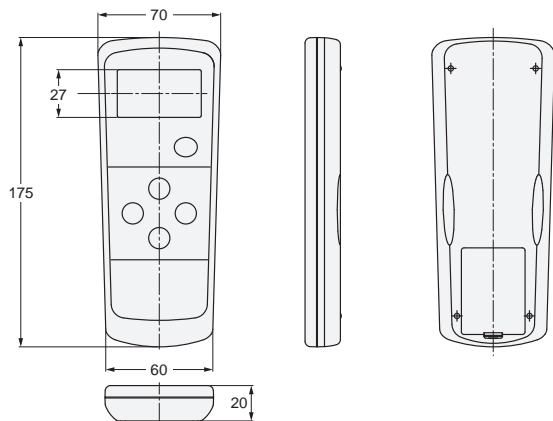


### AC Adapter (Adapter box)

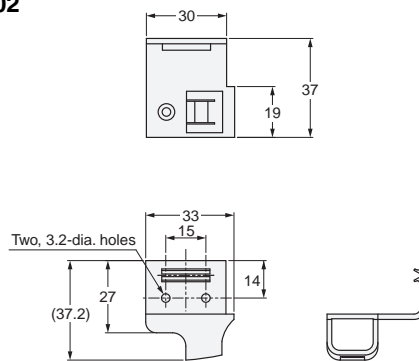
#### ZJ-BAS-PS01



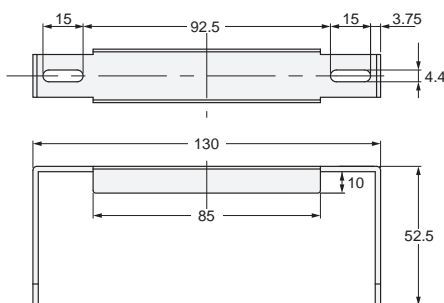
**Remote Control**  
**ZJ-BAS-R01**



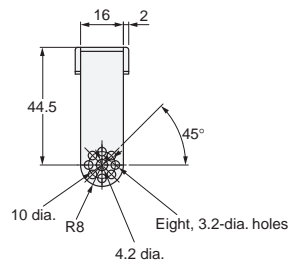
**Receiver for the Remote Control (Bracket)**  
**ZJ-BAS-R02**



**Linking Bracket**  
**ZJ9-BAS-L01**



Material: Stainless steel (SUS304)



## Terms and Conditions Agreement

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