



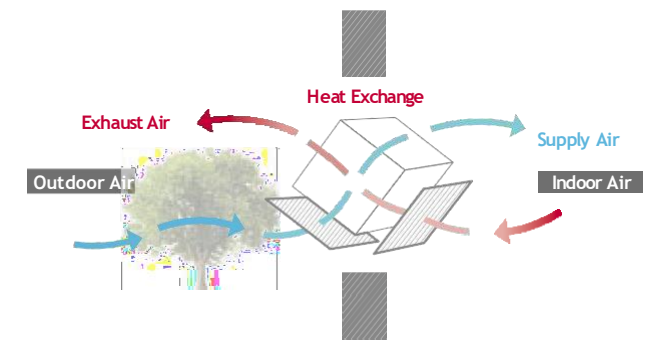
**VENTILATION  
SOLUTIONS**





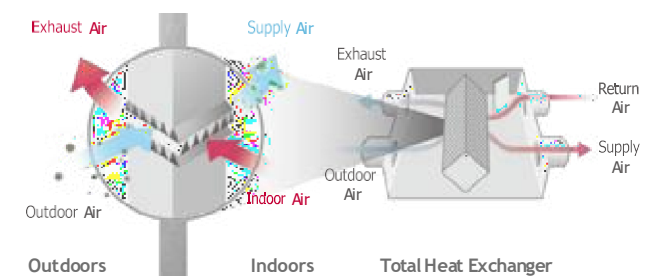
## High Efficiency Heat Exchanger

Efficiency and comfort is ensured through the high-efficiency energy recovery central core. This recovers energy from outgoing indoor air and transfers it to the fresh incoming air without mixing the air stream.



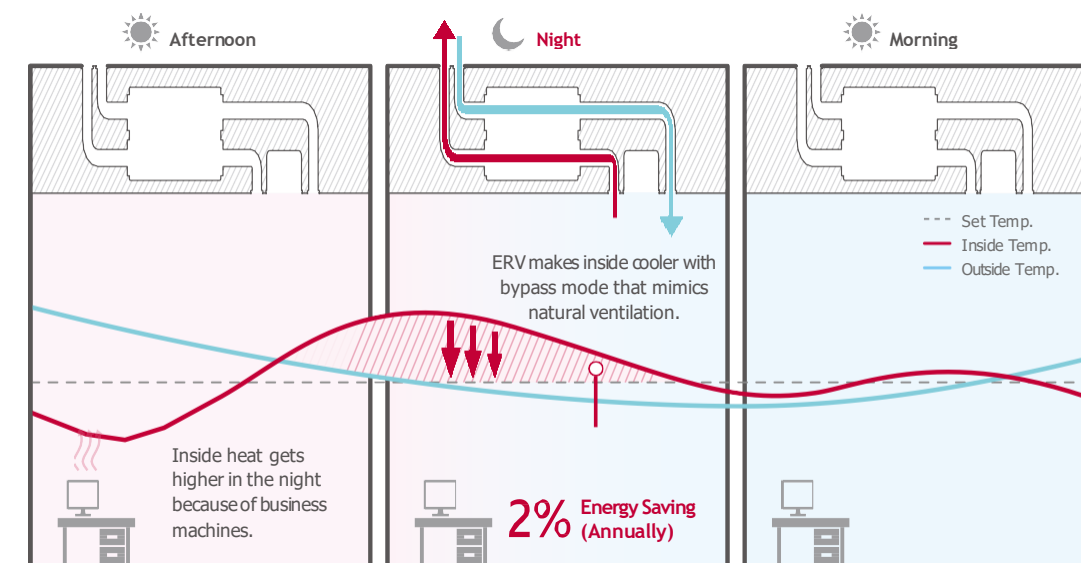
## Cross Flow System

The exhaust system uses a high static sirocco fan to remove stale indoor air. Supply and exhaust air flows are completely separated in the heat exchanger, allowing the LG ERV to filter out particles before supplying outdoor air to ensure indoor air is fresh and healthy.



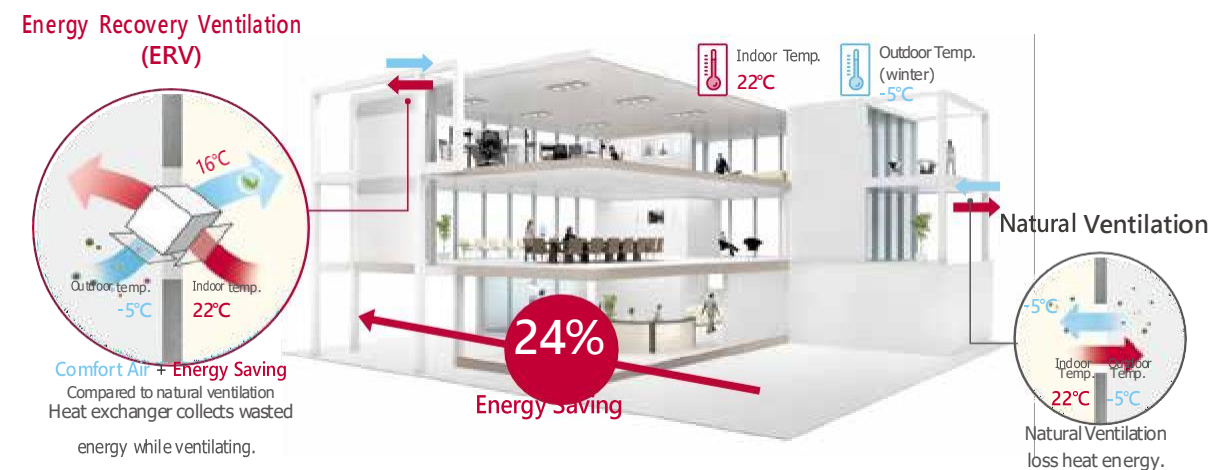
## Night Time Free Cooling

During summer nights, indoor heat can be discharged outdoors and cool outdoor air can be brought indoors for energy savings.



※ This function is operated with 'Night Time Free Cooling' on remote controller. (with MULTIV only)  
※ Energy saving ratio can be differed by weather condition.  
※ Test Condition  
- Office (49,000ft<sup>2</sup>) / Occupancy : 30 / Area : London, UK  
- ERV (1000 CMH) + MULTI V 4 (12HP) Unit Combination  
- Other conditions are subject to BREEAM.

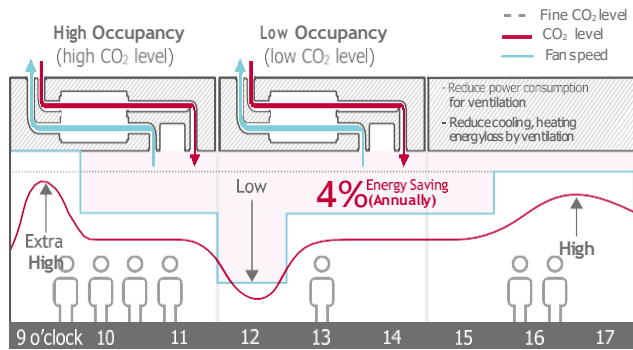
## Necessity of ERV



## CO<sub>2</sub> Auto Operation

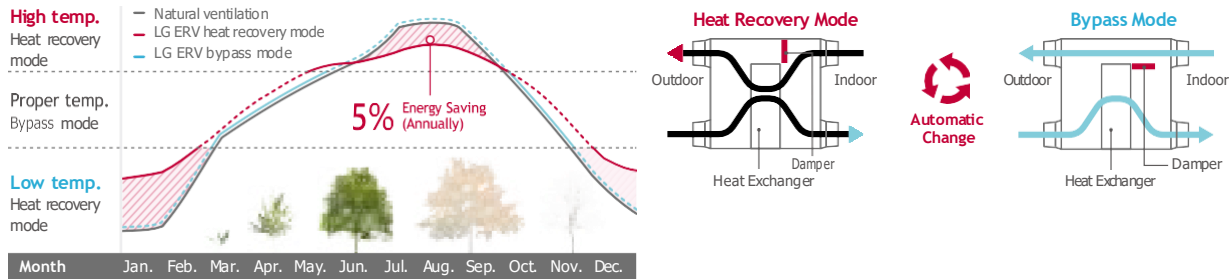
LG ERV reduces energy loss with auto fan speed control following CO<sub>2</sub> level.

※ This function is operated with 'Night Time Free Cooling' on remote controller. (with MULTI V only)  
※ Energy saving ratio can be differed by weather condition.  
※ Test Condition - Office (49,000ft<sup>2</sup>) / Occupancy : 30 / Area : London, UK  
- ERV (1000 CMH) + MULTI V 4 (12HP) Unit Combination  
- Other conditions are subject to BREEAM



## Seasonal Auto Operation

LG ERV senses outdoor temperature and operates automatically following weather conditions.

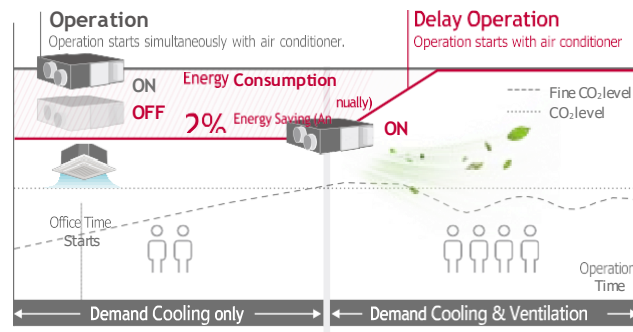


※ This function is operated with 'Auto' mode by wired remote control.  
※ Energy saving ratio can be differed by weather condition.  
※ Test Condition - Office (49,000ft<sup>2</sup>) / Occupancy : 30 / Area : London, UK  
- ERV (1,000 CMH) + MULTI V 4 (12HP) Unit Combination  
- Other conditions are subject to BREEAM

## Delay Operation

When the air conditioner and ERV are switched on simultaneously, delayed operation can reduce unnecessary heating and cooling energy loss by slowing down automatic ERV operation.

※ This function is operated with 'Night Time Free Cooling' on remote controller. (with MULTI V only)  
※ Energy saving ratio can be differed by weather condition.  
※ Test Condition - Office (49,000ft<sup>2</sup>) / Occupancy : 30 / Area : London, UK  
- ERV (1000 CMH) + MULTI V 4 (12HP) Unit Combination  
- Other conditions are subject to BREEAM



## CO<sub>2</sub> Level Monitoring

CO<sub>2</sub> sensor senses CO<sub>2</sub> level in the room. Users can monitor CO<sub>2</sub> level on new wired remote controller, and ERV controls the fan speed automatically following the level.

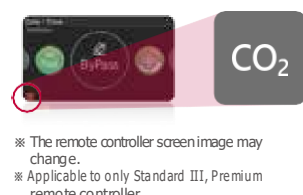
### CO<sub>2</sub> Level Visualization

CO<sub>2</sub> sensor senses indoor CO<sub>2</sub> level and displays it on a new wired remote controller.



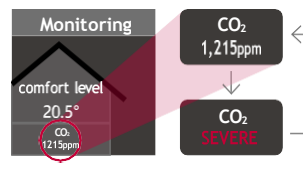
### Main Display

If the CO<sub>2</sub> level is above 900ppm in the room, the red mark appears.



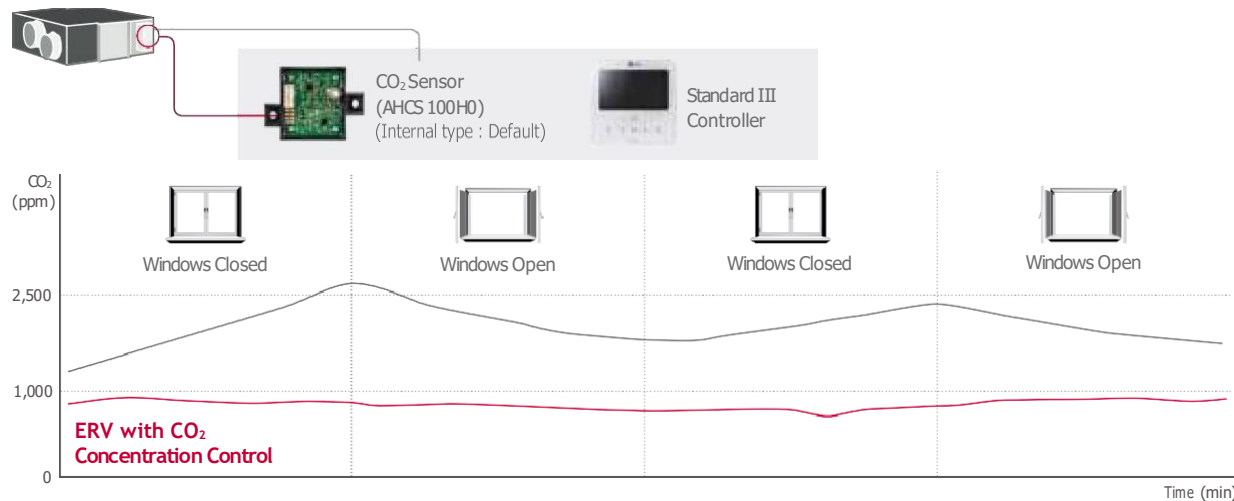
### Further Information

CO<sub>2</sub> level and room condition are displayed continuously.



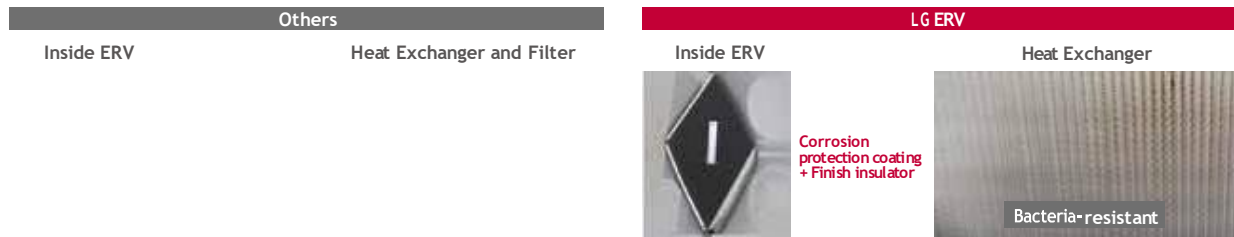
## CO<sub>2</sub> Concentration Control

Using CO<sub>2</sub> sensor, LG ERV controls exhaust air flow automatically to keep indoor air fresh under settled CO<sub>2</sub> concentration.



## High Durability

There is no moving part within the heat exchanger and therefore it has higher durability and reliability. The heat exchanger is made of special thin paper membranes which are bacteria-resistant to prevent harmful bacteria growth, and flame-retardant treated for fire safety.





# Easy Control

The wired remote controller is easy to use.



## Easy

- Navigation buttons, easy to use.
- Simple installation setting



## Display

- Indoor CO<sub>2</sub> level
- Alarm for filter change / remaining time to change filters



## Convenient

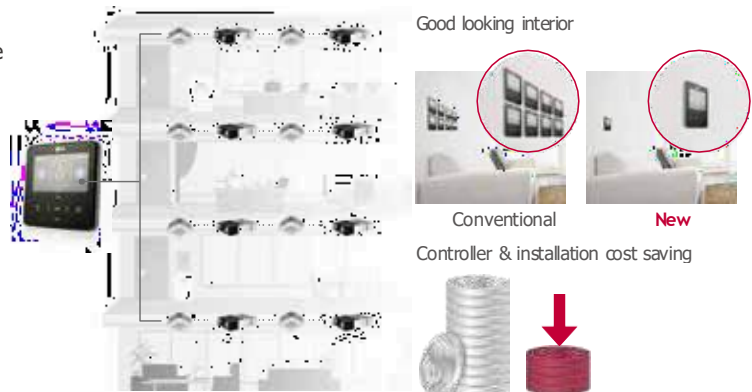
- Flexible display
- Dual display with air conditioner
- Zoom selected directory to increase legibility

# Group Control

1 wired remote controller can work with up to 16 ERVs, including air conditioners. It is convenient for large common spaces such as lobbies.

## Combine Several Units

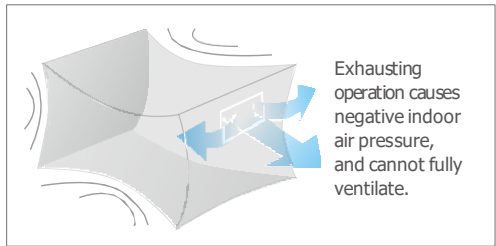
16 units group control is available with 1 remote controller.



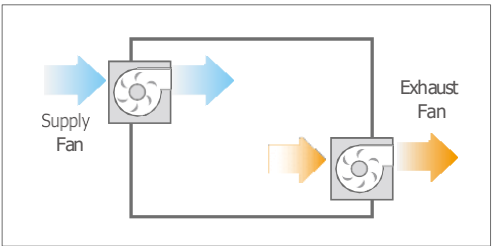
# Fast Ventilation Mode

Fast ventilation mode prevents the spread of contaminants under negative indoor pressure, and makes indoor air fresh and comfortable quickly.

## Only Exhausting



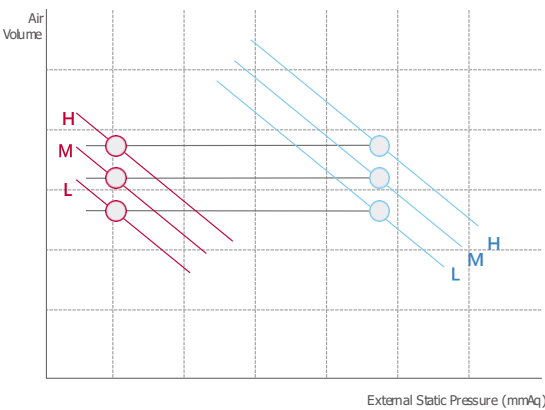
## Fast Ventilation Mode



Exhausting and Supplying Simultaneously

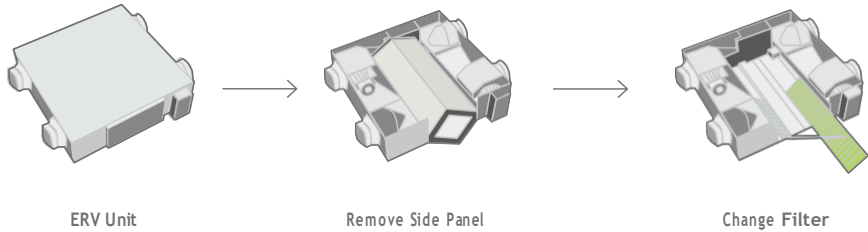
# External Static Pressure Control

The high static pressure fan can control the air volume depending on the length of the duct. It is also easy to control the pressure level by using the remote controller for a more flexible duct installation and easier testing.



# Easy Cleaning and Filter Change

Filter can be conveniently changed and cleaned.



LZ-H025GBA4 / LZ-H035GBA5



MODEL		UNIT	LZ-H025GBA4	LZ-H035GBA5
Dimensions (W x H x D)	Body	mm	988 x 273 x 1,014	
	Body	kg	44	
Weight		kg	44	
Power Supply		V / Ø / Hz	220-240 / 1 / 50	
Normal Air flow		m³/h	250	350
ERV Mode	Operating Step	-	Super-high / High / Low	
	Current	SH / H / L A	0.70 / 0.60 / 0.42	1.05 / 0.90 / 0.50
	Power Input	SH / H / L W	97 / 78 / 52	150 / 125 / 60
	Air Flow	SH / H / L m³/h	250 / 250 / 150	350 / 350 / 210
	External Static Pressure	SH / H / L Pa	100 / 70 / 50	150 / 100 / 50
	Temperature Exchange Efficiency	SH / H / L %	80 / 80 / 83	79 / 79 / 82
	Enthalpy Exchange Efficiency	Heating (SH / H / L) %	70 / 70 / 72	75 / 75 / 80
	Efficiency	Cooling (SH / H / L) %	66 / 66 / 68	71 / 71 / 75
	Energy Label	A+ to G Scale	A	B
	Sound Pressure Level	SH / H / L dB(A)	29 / 28/ 24	35 / 32 / 26
Bypass Mode	Sound Power Level	SH / H / L dB(A)	50	53 / 50 / 42
	Operating Step	-	Super-high / High / Low	
	Current	SH / H / L A	0.70 / 0.60 / 0.42	1.05 / 0.90 / 0.50
	Power Input	SH / H / L W	97 / 78 / 52	150 / 125 / 60
	Air Flow	SH / H / L m³/h	250 / 250 / 150	350 / 350 / 210
	External Static Pressure	SH / H / L Pa	100 / 70 / 50	150 / 100 / 50
Duct Work	Sound Pressure Level	SH / H / L dB(A)	29 / 29/ 25	35 / 33 / 26
	Qty	EA	4	
	Size (Ø)	mm	Ø200	
Supply Air Fan	Qty	EA	1	
	Type	-	Direct-Drive Sirocco	
Exhaust Air Fan	Qty	EA	1	
	Type	-	Direct-Drive Sirocco	
	Qty	EA	2	
Filters	Type	-	Cleanable Fibrous Fleeces	
	Size (W x H x D)	mm	855 x 10 x 160	855 x 10 x 166

Note :  
1. ERV mode : Total Heat Recovery Ventilation mode  
2. Refer to dimensional drawings.  
3. Noise level :  
- The operating conditions are assumed to be standard  
- Sound measured at 1.5m below the center the body.  
- Sound level will vary depending on a range of factors such as the construction(acoustic absorption coefficient) of particular room in which the equipment is installed.  
- The sound level at the air discharge port is about 8 dB(A) higher than the unit's operating sound.  
4. Temperature and Enthalpy Exchange Efficiency at cooling Indoor Temperature : 26.5°C DB, 64.5% RH, Outdoor Temperature : 34.5°C DB, 75% RH  
5. Temperature and Enthalpy Exchange Efficiency at heating Indoor Temperature : 20.5°C DB, 59.5% RH, Outdoor Temperature : 5°C DB, 65% RH  
6. Temperature Exchange efficiency is tested at heating condition.

Accessories

CHASSIS	LZ-H025GBA4	LZ-H035GBA5
Drain Pump	-	-
Cassette Cover	-	-
Refrigerant Leak Detector	-	-
EEV Kit	-	-
Multi-tenant Power Module	-	-
Robot Cleaner	-	-
Pre Filter (Washable)	-	-
Ion Generator	-	-
CO <sub>2</sub> Sensor	○ (embedded)	-
Ventilation Kit	-	-
IR Receiver	-	-
Zone Controller	-	-
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB500 (Modbus)	
External Input (1 point)	-	-
Wi-Fi	-	-

※ ○ : Applied, - : Not applied  
Option : Refer to model name in table

LZ-H150GBA5 / LZ-H200GBA5



MODEL		UNIT	LZ-H150GBA5	LZ-H200GBA5
Dimensions (W x H x D)	Body	mm	1,353x815x 1,230	
	Body	kg	130	
Power Supply		V / Ø / Hz	220-240 / 1 / 50	
Normal Air flow		m³/h	1,500	2,000
ERV Mode	Operating Step	-	Super-high / High / Low	
	Current	SH / H / L A	4.26 / 3.50 / 2.00	5.92 / 4.76 / 2.80
	Power Input	SH / H / L W	660 / 530 / 290	926 / 740 / 420
	Air Flow	SH / H / L m³/h	1,500 / 1,500 / 1,200	2,000 / 2,000 / 1,600
	External Static Pressure	SH / H / L Pa	160 / 100 / 50	160 / 100 / 50
	Temperature Exchange Efficiency	SH / H / L %	81 / 81 / 83	79 / 79 / 80.9
	Enthalpy Exchange Efficiency	Heating (SH / H / L) %	73 / 73 / 76	71 / 71/ 73
	Efficiency	Cooling (SH / H / L) %	66 / 66 / 70	64 / 64 / 67
	Sound Pressure Level	SH / H / L dB(A)	43 / 39 / 35	43 / 40 / 36
	Sound Power Level	SH / H / L dB(A)	59 / 56 / 50	62 / 59 / 55
Bypass Mode	Operating Step	-	Super-high / High / Low	
	Current	SH / H / L A	4.26 / 3.50 / 2.00	5.92 / 4.76 / 2.80
	Power Input	SH / H / L W	660 / 530 / 290	926 / 740 / 420
	Air Flow	SH / H / L m³/h	1,500 / 1,500 / 1,200	2,000 / 2,000 /
	External Static Pressure	SH / H / L Pa	160 / 100 / 50	160 / 100 / 50
	Sound Pressure Level	SH / H / L dB(A)	44 / 40 / 36	44/ 41 / 37
Duct Work	Qty	EA	4 + 2	
	Size (Ø)	mm	Ø250 + Ø350	
Supply Air Fan	Qty	EA	2	
	Type	-	Direct-Drive Sirocco	
Exhaust Air Fan	Qty	EA	2	
	Type	-	Direct-Drive Sirocco	
Filters	Qty	EA	4	
	Type	-	Cleanable Fibrous Fleeces	
	Size (W x H x D)	mm	1,148 x 6 x 245	

Note :  
1. ERV mode : Total Heat Recovery Ventilation mode  
2. Refer to dimensional drawings.  
3. Noise level :  
- The operating conditions are assumed to be standard  
- Sound measured at 1.5m below the center the body.  
- Sound level will vary depending on a range of factors such as the construction(acoustic absorption coefficient) of particular room in which the equipment is installed.  
- The sound level at the air discharge port is about 8 dB(A) higher than the unit's operating sound.  
4. Temperature and Enthalpy Exchange Efficiency at cooling Indoor Temperature : 26.5°C DB, 64.5% RH, Outdoor Temperature : 34.5°C DB, 75% RH  
5. Temperature and Enthalpy Exchange Efficiency at heating Indoor Temperature : 20.5°C DB, 59.5% RH, Outdoor Temperature : 5°C DB, 65% RH  
6. Temperature Exchange efficiency is tested at heating condition.

Accessories

CHASSIS	LZ-H150GBA5	LZ-H200GBA5
Drain Pump	-	-
Cassette Cover	-	-
Refrigerant Leak Detector	-	-
EEV Kit	-	-
Multi-tenant Power Module	-	-
Robot Cleaner	-	-
Pre Filter (Washable)	-	-
Ion Generator	-	-
CO <sub>2</sub> Sensor	○ (embedded)	-
Ventilation Kit	-	-
IR Receiver	-	-
Zone Controller	-	-
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB500 (Modbus)	
External Input (1 point)	-	-
Wi-Fi	-	-

※ ○ : Applied, - : Not applied  
Option : Refer to model name in table

ZE050GUCCA0 / ZE080GUCD A0  
ZE100GUCD A0



※ 2Q Launching

- Ventilation with sensible and latent heat recovery
- Air flow coverage from 500 to 1,000 m³/h
- Compact size from 273 mm height
- Various filters can be used to improve indoor air quality (IAQ)
  - Filters grades : ePM10 50% (M5), ePM1 70% (F7), ePM1 80% (F9)
  - A second filter can be installed on the supply air side
- Built-in CO<sub>2</sub> concentration sensor
  - CO<sub>2</sub> Auto Operation based on CO<sub>2</sub> level
- Wi-Fi connection (optional)
- Hygienic material with Safe plus insulation
- Group control available up to 16 units with one wired controller

MODEL			UNIT	ZE050GUCCA0	ZE080GUCD A0	ZE100GUCD A0
Dimensions (W x H x D)	Body		mm	1,014 x 273 x 988	1,062 x 365 x 1,240	
Weight	Body		kg	41.7	54.4	54.4
Power Supply			V / Ø / Hz	220-240 / 1 / 50-60		
Normal Airflow Rate			m³/h	500	800	1,000
ERV Mode	Operating Step		-	High / Mid / Low		
	Current	SH / H / L	A	1.7 / 1.2 / 0.8	2.2 / 1.4 / 0.8	3.0 / 1.9 / 1.0
	Power Input	SH / H / L	W	250 / 160 / 105	330 / 200 / 100	475 / 280 / 140
	Airflow Rate	SH / H / L	m³/h	500 / 400 / 300	800 / 640 / 480	1,000 / 800 / 600
	External Static Pressure	SH / H / L	Pa	150 / 96 / 54	160 / 102 / 57	160 / 102 / 57
	Temperature Exchange Efficiency	SH / H / L	%	78	75	73
	Enthalpy Exchange Efficiency	Heating (SH / H / L)	%	75 / 75 / 78	73 / 76 / 79	72 / 73 / 74
		Cooling (SH / H / L)	%	68 / 68 / 75	68 / 70 / 73	63 / 67 / 71
	Sound Pressure Level	SH / H / L	dB(A)	39 / 34 / 29	39 / 34 / 28	40 / 36 / 29
	Sound Power Level	SH / H / L	dB(A)	TBD	TBD	TBD
Bypass Mode			-	○		
Duct Work	Qty		EA	4		
	Size (Ø)		mm	200	250	250
Supply Air Fan	Qty		EA	1		
	Type		-	Direct-Drive Sirocco		
Exhaust Air Fan	Qty		EA	1		
	Type		-	Direct-Drive Sirocco		
Filters	Default		Grade (Qty)	OA: F7 RA: M5		
	Option		Grade	OA: M5, F7, F9 SA: M5, F7, F9		

- Note :
1. ERV mode : Total Heat Recovery Ventilation mode
  2. Refer to dimensional drawings.
  3. Noise level :
    - The operating conditions are assumed to be standard
    - Sound measured at 1.5m below the center the body.
    - Sound level will vary depending on a range of factors such as the construction(acoustic absorption coefficient) of particular room in which the equipment is installed.
    - The sound level at the air discharge port is about 8 dB(A) higher than the unit's operating sound.
  4. Temperature and Enthalpy Exchange Efficiency at cooling Indoor Temperature : 26.5°C DB, 64.5% RH, Outdoor Temperature : 34.5°C DB, 75% RH
  5. Temperature and Enthalpy Exchange Efficiency at heating Indoor Temperature : 20.5°C DB, 59.5% RH, Outdoor Temperature : 5°C DB, 65% RH
  6. Temperature Exchange efficiency is tested at heating condition.

Accessories

Air

Interlocking with MULTI V

CHASSIS	ZE050GUCCA0	ZE080GUCD A0	ZE100GUCD A0
Filter		M5, F7, F9	
CO <sub>2</sub> sensor		Embedded	
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB500 (Modbus)		
Wi-Fi	PWFMDD200		

※ ○ : Applied, - : Not applied  
Option : Refer to model name in table

LG Filters

MODEL (CMH)	500	800, 1,000
M5	AFT050AEM50	AFT100AEM50
F7	AFT050AEF70	AFT100AEF70
F9 (Lanching date will be updated)	AFT050AEF90	AFT100AEF90








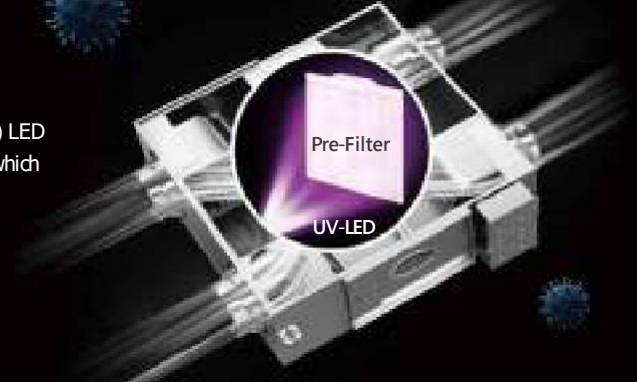
## Clean Air Supply

Remove Up to 99.99% of Harmful Particles on Pre-Filter with UVnano


### UVnano™

UVnano is a compound word of UV (ultraviolet) LED which reduces harmful bacteria, and nanometer which is the UV wavelength unit.





Pre-Filter  
UV-LED

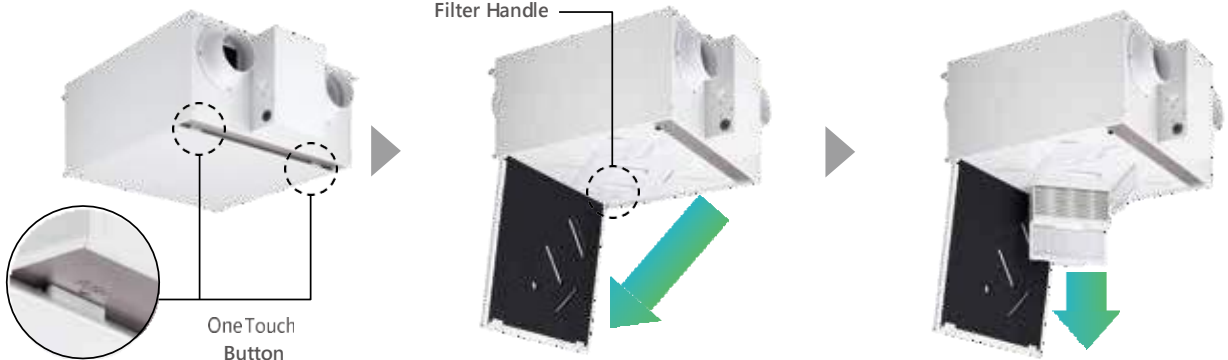


UVnano Technology Applied

It Prevents 99.99 % of Bacteria and Viruses from Growing

## Easy Filter Maintenance

Via the one-touch button, the user can open the access door at the bottom of the unit, pull down the heat exchanger to change the filters. It is easy and simple without the need for any additional tools.



Filter Handle

One Touch Button

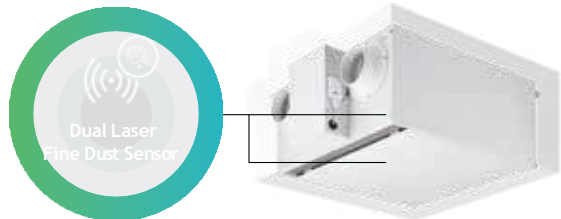
After pressing the one-touch button, unhook the safety hooks that holds door from failing to fully open the door.

Hold the filter handle and pull it out down.

# Smart Control

## ① Dual Laser Fine Dust Sensor

Two fine dust sensors monitor the incoming air and the supplied air to the room in real time to ensure that clean air is always supplied.



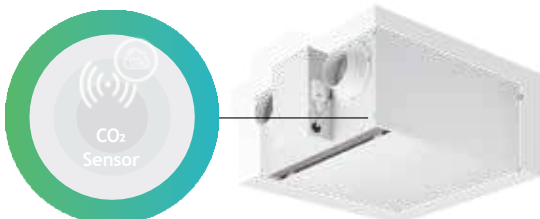
When the measured dust concentration in the air supplied to the room is higher than the pre-set value, a notification or text message will be sent out for filter replacement.

\* Wi-Fi Modem is Optional.



## ② CO<sub>2</sub> Monitoring

The embedded CO<sub>2</sub> sensor monitors the carbon dioxide concentration in the room in real time and automatically controls the ventilation rate.



The system monitors the CO<sub>2</sub> concentration in the room and adjusts the ventilation rate accordingly. When the CO<sub>2</sub> concentration is high, it increases the ventilation rate, and automatically reduces it when the concentration is low.

\* Wi-Fi Modem is Optional.

\* CO<sub>2</sub> Sensor is Embedded.



## ③ Control ERV Anytime, Anywhere

Wired Remote Control	Mobile	Third-Party Compatibility
- Indoor CO <sub>2</sub> concentration - Dust concentration in the supply air - Dust concentration in outdoor air	Check and control the Indoor air conditioner anytime, anywhere	With the dry contact connected, Modbus protocol is available.

\* To use 3<sup>rd</sup> party wall pad, please contact Sales Engineer.

## ④ Filter Maintenance Alarm

The filter replacement notification and text message are sent when the fine dust concentration is higher than the pre-set point.



## LZ-H015GBA6 / LZ-H020GBA6



MODEL		UNIT	LZ-H015GBA6	LZ-H020GBA6
Dimensions (W x H x D)	Body	mm	640 x 320 x 640	640 x 320 x 640
	Weight	kg	23	23
Power Supply		V / Ø / Hz	220 - 240 / 1 / 50	220 - 240 / 1 / 50
ERV Mode	Operating Step	-	SH / H / L	SH / H / L
	Current	SH / H / L	A	0.43 / 0.38 / 0.23
	Power Input	SH / H / L	W	56 / 49 / 26
	Air Flow	SH / H / L	CMH	150 / 150 / 80
	External Static Pressure	SH / H / L	Pa	100 / 70 / 50
	Temperature Exchange Efficiency	Heating (SH / H / L) (ErP) %	85	82
		Heating (SH / H / L) (JIS) %	80 / 80 / 84	78 / 78 / 82
		Cooling (SH / H / L) (JIS) %	74 / 74 / 83	70 / 70 / 81
	Enthalpy Exchange Efficiency	Heating (SH / H / L) (JIS) %	79 / 79 / 83	75 / 75 / 81
		Cooling (SH / H / L) (JIS) %	74 / 74 / 80	68 / 68 / 76
Bypass Mode	Energy Label	A+ to G Scale	-	A
	Sound Power Level	SH / H / L	dB(A)	53 / 51 / 45
	Sound Pressure Level	SH / H / L	dB(A)	28 / 26 / 21
	Current	SH / H / L	A	0.45 / 0.40 / 0.26
	Power Input	SH / H / L	W	63 / 53 / 31
Operation Range	Air Flow	SH / H / L	CMH	150 / 150 / 80
	External Static Pressure	SH / H / L	Pa	100 / 70 / 50
	Outdoor Air Temperature / Relative Humidity	°C / %	-10 ~ 40 / 20 ~ 80	-10 ~ 40 / 20 ~ 80
Duct Work	Qty	EA	4	4
	Size (Ø)	mm	125	125
Fan Motor	Supply Air Fan	RPM	1,850 / 1,710 / 1,300	2,050 / 1,910 / 1,400
	Exhaust Air Fan	RPM	1,750 / 1,600 / 1,250	1,910 / 1,770 / 1,320
	Max.	RPM	2,100	2,100
	Min.	RPM	1,000	1,000
Filters	Grade <sup>1)</sup>	-	F8	F8
	Size (W x H x D)	mm	278 x 276 x 50	278 x 276 x 50

Note :  
1. Temperature and Enthalpy Exchange Efficiency are based on the following conditions. Temperature Exchange Efficiency is tested at heating conditions.  
- Cooling : Indoor Ambient Temp. 26.5°CDB / 64.5%RH, Outdoor Ambient Temp. 34.5°CDB / 75%RH  
- Heating : Indoor Ambient Temp. 20.5°CDB / 59.5%RH, Outdoor Ambient Temp. 5°CDB / 65%RH  
2. The operating sound measured at the point 1.5 m below the center of the unit is converted to that measured at an anechoic chamber.  
3. The specifications, designs and information here are subject to change without notice.



LZ-H015GBA6 / LZ-H020GBA6



Accessories

CHASSIS	LZ-H015GBA6	LZ-H020GBA6
CO <sub>2</sub> Sensor		Embedded
UVnano		Embedded
Pre Filter (Washable)		Embedded
Dual Laser Fine Dust Sensor		Embedded
Remote Controller (PREMTB101 / PREMTBB11)		○
Wi-Fi Modem (PWFMD200)		○

※ ○ : Applied, - : Not applied  
Option : Refer to model name in table

Functions

MODEL	LZ-H015GBA6	LZ-H020GBA6
Air Purification	UVnano	○
	Pre-Filter	○
	Fine Filter (ePM1 95%)	○
Reliability	Self Diagnosis	○
Convenience	Auto Restart	○
	Child Lock	○
	Forced Operation	○
	Group Control	○
	Turn On / Off Reservation	○
	Schedule	○
	Night Time Free Cooling	○
	Delayed Operation	○
	Airflow Amount Customized Operation	○
	Seasonal Customized Operation	○
Installation	Seasonal Auto Operation	○
	E.S.P. Control	○
	Central Control (LGAP)	○
ETC	Filter Alarm	○
	CO <sub>2</sub> Sensor	○
	Wi-Fi	Accessory

Note  
1. ○ : Applied, X : Not applied  
Accessory : Ordered and purchased separately the accessory package referring to the model name provided and install at field.  
Accessory line-ups varies by region, so check your local catalogue or local sales material.  
2. Some functions can be limited by remote controller.