

New Mini ECOi LZ2 Series R32

Outstanding efficiency in a compact body and continuous operation even at extreme ambient temperatures.





**INDUSTRY 1ST
8 HP AND
10 HP MINI
VRF UNITS
WITH R32**



1 Low GWP and less refrigerant

The new Mini ECOi LZ2 Series utilizes environmentally friendly R32 refrigerant, reducing the total amount of refrigerant by 20 % and more, resulting in lower GWP, reduced by 75 %*.

* As a result of applying R32 while at the same time reducing the total refrigerant amount.

2 Outstanding efficiency at most challenging ambient conditions

Re-engineered for better performance, the LZ2 series produces extraordinary savings with SEER levels up to 8,50 and SCOP levels up to 5,05 (for 4 HP model). The large range of outdoor units from 12 kW to 28 kW can also work at extreme ambient temperatures, down to -20 °C in heating and up to 52 °C in cooling, providing a very wide range of operating ability.

3 More flexibility for your project

The ECOi LZ2 series provides ease of installation with long piping lengths and small footprints in a lightweight body. A variety of indoor units, supporting Panasonic's optional R32 refrigerant leak detector, increases the flexibility for installers. A wide range of individual and central controllers, the new generation Smart and Service Cloud as well as apps for end users and installers provide a fully customizable monitoring and controlling solution.



Minimum environmental impact

Panasonic has designed the LZ2 series in order to minimize the environmental impact of the system. Low GWP refrigerant R32 and highest efficiency levels, ensure this through the total operational lifetime.



VRF with outstanding energy-saving performance and superior SEER and SCOP

New Mini ECOi LZ2 provides the optimal performance in any climatic condition.

WIDE OPERATING RANGE

-20 °C in heating to
52 °C in cooling

8,50 | **5,05**
SEER | SCOP

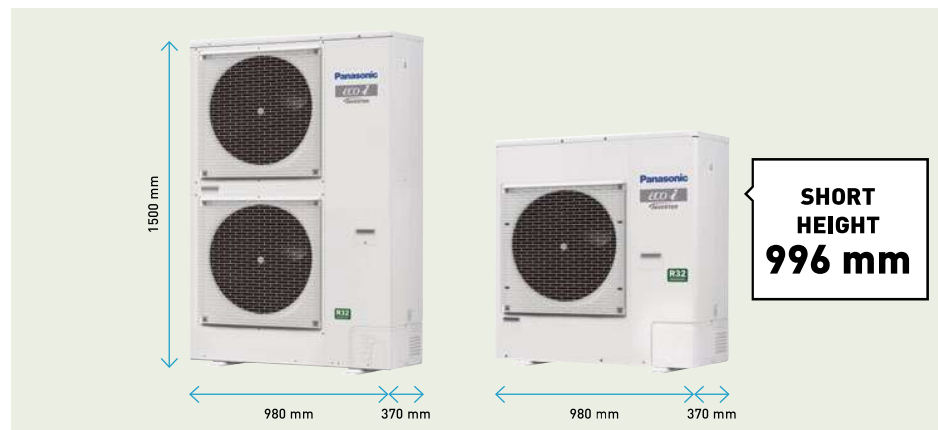
EXTRAORDINARY SAVINGS

ECOi LZ2 mini VRF series from 12 to 28 kW

- Improving protection 24/7. New and unique indoors with nanoe™ X, hydroxyl radicals contained in water.
- SEER levels up to 8,50 and SCOP levels up to 5,05 (for 4 HP model)
- Low GWP and highly reduced refrigerant volume
- Improved connectivity with CONEX remote controllers and app support, Smart and Service Cloud applications and support for communication protocols for BMS integration
- Wide range of connectable units allowing wide range of installations with and without refrigerant mitigation
- Increased indoor/outdoor capacity ratio up to 150 %
- Quiet mode operation with low capacity drop
- Same Panasonic DNA with Panasonic compressors and precise temperature control thanks to discharge temperature sensors in the indoor units
- Continuous operation at extreme ambient temperatures: -20 °C (heating) to 52 °C (cooling)
- Flexible mitigation measures, with R32 refrigerant leak detector/alarm to be installed only when required
- 35 Pa static pressure

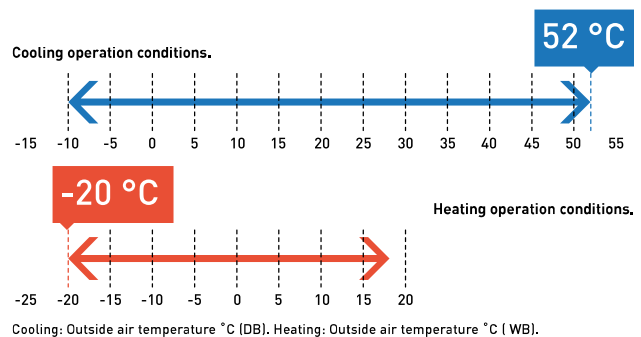
For the most challenging spaces

The new Mini ECOi LZ2 R32 VRF system is the ideal solution to fit into any application thanks to its compact design and long piping length support.



Extended design operation conditions

LZ2 mini VRF is extremely reliable even under the most difficult conditions. The units can operate in cooling mode at extreme temperatures, 52 °C in cooling and -20 °C in heating mode.















Compatible with a large range of indoor units and controls

An expansion of Panasonic VRF line up, the new mini ECOi R32 is compatible with a large range of indoor units and can utilize all Panasonic's scalable control and monitoring solutions.

Wide range of indoor units, either supporting Panasonic's optional R32 refrigerant leak detector alarm or having built-in detectors provide a great flexibility for all types of installation.

| | | | |
|---|--|---|---|
|  | 4 way 90x90 cassette |  | Connects to Panasonic R32 sensor |
|  | 4 way 60x60 cassette |  | Connects to Panasonic R32 sensor |
|  | Variable static pressure adaptive duct |  | Built-in R32 sensors |
|  | Wall-mounted |  | Connects to Panasonic R32 sensor |
|  | Slim variable static pressure hide-away |  | Connects to Panasonic R32 sensor |

Scaling your control options from a single zone to geographically distributed facilities

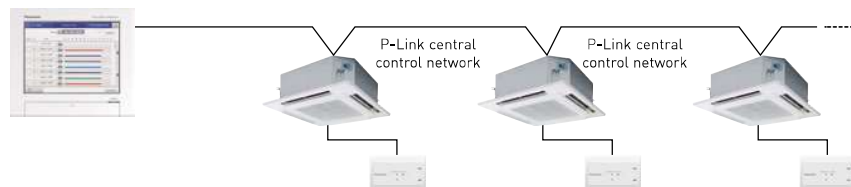
LZ2 series are fully compatible with all control and connectivity solutions from Panasonic. With a wide range of individual controllers, hotel room controllers, optional wireless adapters, VRF Smart Connectivity+, easy BMS connection with P-link and Panasonic AC Smart Cloud compatibility. LZ2 series, the most flexible control and monitoring R32 solution in the market.

Optional R32 refrigerant leak detector alarm from Panasonic

For compatible indoor unit models, Panasonic offers its optional external R32 refrigerant leak detector (CZ-CGLSC1). This enables the customer to decide if a R32 refrigerant leak detector is required to comply with the restrictions, or if the indoor unit may be safely installed in this room without it. This optional leakage detection sensor has an integrated alarm buzzer and can output a signal to a central alarm system in the building. The device is connected to the remote control terminals of the indoor unit and can be used in combination with any of the Panasonic VRF remote controllers, either wired or wireless.



The alarm triggered by the R32 refrigerant leak detector will also be transmitted and displayed on any connected centralised controller.



**SHORT
HEIGHT
996 mm**



**NEW
2021**

NEW Mini ECOi LZ2 Series 4 to 6 HP • R32

Outstanding efficiency in a compact body and continuous operation even at extreme ambient temperatures.

| HP | | | 4 HP | 5 HP | 6 HP | 4 HP | 5 HP | 6 HP |
|---|-----------------------|---------------------|---|---|---|---|---|---|
| Outdoor units | | | U-4LZ2E5 | U-5LZ2E5 | U-6LZ2E5 | U-4LZ2E8 | U-5LZ2E8 | U-6LZ2E8 |
| Power supply | Voltage | V | 220-230-240 | 220-230-240 | 220-230-240 | 380-400-415 | 380-400-415 | 380-400-415 |
| | Phase | | Single phase | Single phase | Single phase | Three phase | Three phase | Three phase |
| | Frequency | Hz | 50 | 50 | 50 | 50 | 50 | 50 |
| Cooling capacity | | kW | 12,1 | 14,0 | 15,5 | 12,1 | 14,0 | 15,5 |
| EER ¹⁾ | | W/W | 4,53 | 4,12 | 3,88 | 4,53 | 4,12 | 3,88 |
| SEER ²⁾ | | | 8,50 | 8,12 | 7,71 | 8,50 | 8,12 | 7,71 |
| Current cooling | | A | 13,30-12,80-12,20 | 16,90-16,20-15,50 | 19,60-18,70-18,00 | 4,37-4,15-4,00 | 5,50-5,23-5,04 | 6,44-6,12-5,89 |
| Input power cooling | | kW | 2,67 | 3,40 | 4,00 | 2,67 | 3,40 | 4,00 |
| Heating capacity | | kW | 12,5 | 16,0 | 16,5 | 12,5 | 16,0 | 16,5 |
| COP ¹⁾ | | W/W | 5,27 | 4,71 | 4,42 | 5,27 | 4,71 | 4,42 |
| SCOP ²⁾ | | | 5,05 | 4,61 | 4,59 | 5,05 | 4,61 | 4,59 |
| Current heating | | A | 12,00-11,40-11,00 | 16,90-16,20-15,50 | 18,50-17,70-17,00 | 3,91-3,71-3,58 | 5,50-5,22-5,03 | 6,02-5,72-5,51 |
| Input power heating | | kW | 2,37 | 3,40 | 3,73 | 2,37 | 3,40 | 3,73 |
| Starting current | | A | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 |
| Maximum current | | A | 19,6 | 23,7 | 26,5 | 7,2 | 9,2 | 9,9 |
| Maximum input power | | kW | 3,92-4,10-4,28 | 4,76-4,98-5,19 | 5,41-5,66-5,90 | 4,40-4,63-4,80 | 5,69-5,99-6,22 | 6,15-6,47-6,72 |
| Maximum number of connectable indoor units ³⁾ | | | 7(10) | 8(12) | 9(12) | 7(10) | 8(12) | 9(12) |
| External static pressure | | Pa | 0-35 | 0-35 | 0-35 | 0-35 | 0-35 | 0-35 |
| Air flow | | m ³ /min | 69 | 72 | 74 | 69 | 72 | 74 |
| Sound pressure | Cool | dB(A) | 52 | 53 | 54 | 52 | 53 | 54 |
| | Cool (Silent 1/2/3/4) | dB(A) | 49/47/45/45 | 50/48/46/45 | 51/49/47/45 | 49/47/45/45 | 50/48/46/45 | 51/49/47/45 |
| | Heat | dB(A) | 54 | 56 | 56 | 54 | 56 | 56 |
| Sound power | Cool / Heat | dB(A) | 69/72 | 70/74 | 72/75 | 69/72 | 70/74 | 72/75 |
| Dimension | HxWxD | mm | 996x980x370 | 996x980x370 | 996x980x370 | 996x980x370 | 996x980x370 | 996x980x370 |
| Net weight | | kg | 94 | 94 | 94 | 94 | 94 | 94 |
| Pipe diameter | Liquid pipe | Inch (mm) | 3/8(9,52) | 3/8(9,52) | 3/8(9,52) | 3/8(9,52) | 3/8(9,52) | 3/8(9,52) |
| | Gas pipe | Inch (mm) | 5/8(15,88) | 5/8(15,88) | 5/8(15,88) | 5/8(15,88) | 5/8(15,88) | 5/8(15,88) |
| Maximum piping length (total) | | m | 90(180) | 90(180) | 90(180) | 90(180) | 90(180) | 90(180) |
| Elevation difference (in/out) | | m | 50(Outdoor unit upper)/ 40(Outdoor unit lower) | 50(Outdoor unit upper)/ 40(Outdoor unit lower) | 50(Outdoor unit upper)/ 40(Outdoor unit lower) | 50(Outdoor unit upper)/ 40(Outdoor unit lower) | 50(Outdoor unit upper)/ 40(Outdoor unit lower) | 50(Outdoor unit upper)/ 40(Outdoor unit lower) |
| | | | | | | | | |
| Refrigerant (R32) | | kg | 2,7 | 2,7 | 2,7 | 2,7 | 2,7 | 2,7 |
| Maximum allowable indoor / outdoor capacity ratio ⁴⁾ | | % | 50-150(130) | 50-150(130) | 50-150(130) | 50-150(130) | 50-150(130) | 50-150(130) |
| Operating range | Cool Min - Max | °C | -10-52 | -10-52 | -10-52 | -10-52 | -10-52 | -10-52 |
| | Heat Min - Max | °C | -20-18 | -20-18 | -20-18 | -20-18 | -20-18 | -20-18 |

1) EER and COP calculation is based on EN 14511. 2) SEER/SCOP is calculated based on the seasonal space cooling/heating efficiency "η" values of the COMMISSION REGULATION (EU) 2016/2281. SEER, SCOP = (η + Correction) × PEF. 3) The number in parenthesis indicates maximum number of connectable indoor unit in case of 1,5kW indoor units connection. 4) The number in parenthesis indicates maximum allowed indoor/outdoor capacity ratio in case of 1,5 kW indoor units connection.

Minimum environmental impact

Panasonic has designed the LZ2 series in order to minimize the environmental impact of the system. Low GWP refrigerant R32 and highest efficiency levels ensure this through the total operational lifetime.

For the most challenging spaces

The new Mini ECOi LZ2 R32 VRF system is the ideal solution to fit into any application thanks to its compact design and long piping lengths.

Technical focus

- SEER levels up to 8,50 and SCOP levels up to 5,05 (for 4 HP model)
- Continuous operation at extreme ambient temperatures: -20 °C (heating) to 52 °C (cooling)
- Wide range of connectable units
- New and unique indoors with nanoe™ X, hydroxyl radicals contained in water
- Allowing wide range of installations with and without mitigation measures
- Flexible mitigation measures, with R32 refrigerant leak detector/alarm to be installed only when required



INTERNET CONTROL: Optional.

NEW
2021**INDUSTRY 1ST
8 HP AND 10 HP
MINI VRF UNITS
WITH R32****NEW Mini ECOi LZ2 Series 8 and 10 HP • R32**

Introducing widest range of R32 Mini VRF.

| HP | | | 8 HP | 10 HP |
|---|-----------------------|---------------------|---|---|
| Outdoor units | | | U-8LZ2E8 | U-10LZ2E8 |
| Power supply | Voltage | V | 380-400-415 | 380-400-415 |
| | Phase | | Three phase | Three phase |
| | Frequency | Hz | 50 | 50 |
| Cooling capacity | | kW | 22,4 | 28,0 |
| EER ¹⁾ | | W/W | 3,84 | 3,47 |
| SEER ²⁾ | | | 7,56 | 7,08 |
| Current cooling | | A | 9,73-9,25-8,91 | 13,2-12,5-12,1 |
| Input power cooling | | kW | 5,83 | 8,07 |
| Heating capacity | | kW | 25,0 | 28,0 |
| COP ¹⁾ | | W/W | 4,30 | 4,47 |
| SCOP ²⁾ | | | 4,59 | 4,60 |
| Current heating | | A | 9,81-9,32-8,98 | 10,5-9,93-9,57 |
| Input power heating | | kW | 5,81 | 6,26 |
| Starting current | | A | 1,0 | 1,0 |
| Maximum current | | A | 13,7 | 19,5 |
| Maximum input power | | kW | 8,21-8,64-8,96 | 11,9-12,6-13,0 |
| Maximum number of connectable indoor units ³⁾ | | | 16 | 16 |
| External static pressure | | Pa | 0-35 | 0-35 |
| Air flow | | m ³ /min | 158 | 167 |
| Sound pressure | Cool | dB(A) | 59,0 | 60,0 |
| | Cool (Silent 1/2/3/4) | dB(A) | 56/54/52/50 | 57/55/53/50 |
| Sound power | Cool | dB(A) | 72 | 74 |
| | | | | |
| Dimension | HxWxD | mm | 1500x980x370 | 1500x980x370 |
| Net weight | | kg | 125 | 126 |
| Pipe diameter | Liquid pipe | Inch (mm) | 3/8(9,52) | 3/8(9,52) |
| | Gas pipe | Inch (mm) | 3/4(19,05) | 7/8(22,22) |
| Maximum piping length (total) | | m | 100(300) | 100(300) |
| Elevation difference (in/out) | | m | 50(Outdoor unit upper)/40(Outdoor unit lower) | 50(Outdoor unit upper)/40(Outdoor unit lower) |
| Refrigerant (R32) | | kg | 4,9 | 5,1 |
| Maximum allowable indoor / outdoor capacity ratio ⁴⁾ | | % | 50-150(130) | 50-150(130) |
| Operating range | Cool Min - Max | °C | -10-52 | -10-52 |
| | Heat Min - Max | °C | -20-18 | -20-18 |

1) EER and COP calculation is based on EN 14511. 2) SEER/SCOP is calculated based on the seasonal space cooling/heating efficiency "η" values of the COMMISSION REGULATION (EU) 2016/2281. SEER, SCOP = (η + Correction) × PEF. 3) The number in parenthesis indicates maximum number of connectable indoor unit in case of 1,5kW indoor units connection. 4) The number in parenthesis indicates maximum allowed indoor/outdoor capacity ratio in case of 1,5 kW indoor units connection.

Perfect fit for small to medium size projects

8 and 10 HP LZ2 Mini VRF units bring in the total benefits of a VRF system in a smaller application. You can enjoy advanced individual and central VRF control options including the revolutionary Panasonic AC Smart Cloud and AC Service Cloud.

For the most difficult conditions

New ECOi LZ2 series are able to operate at the hardest conditions from -20 °C up to +52 °C providing continuous and efficient, heating and cooling for your space all year long.

Technical focus

- SEER levels up to 7,56 and SCOP levels up to 4,59 (for 8 HP model)
- Continuous operation at extreme ambient temperatures: -20 °C (heating) to 52 °C (cooling)
- Widest range of connectable units in R32 VRF
- New and unique indoors with nanoe™ X, hydroxyl radicals contained in water
- Allowing wide range of installations with and without refrigerant mitigation
- Flexible mitigation measures, with R32 refrigerant leak detector/alarm to be installed only when required



INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB, Cooling Outdoor 35 °C DB / 24 °C WB, Heating Indoor 20 °C DB, Heating Outdoor 7 °C DB / 6 °C WB, (DB: Dry Bulb; WB: Wet Bulb). Specifications subject to change without notice. For detailed information about ErP / Energy Labeling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.