LN Black Diamond Smart Series
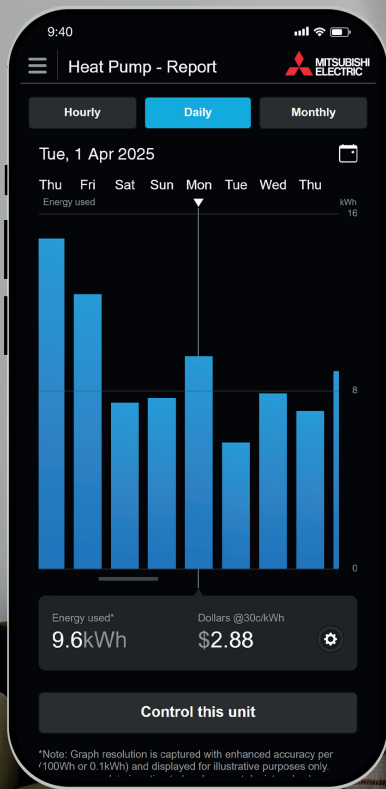
Personalised Comfort Redefined

Our most intelligent, energy-saving heat pump yet.

energy
MONITORING

New Zealand's Most Trusted Heat Pump

LN Black Diamond Smart Series

The LN Black Diamond Smart Series sets the new standard in personalised comfort and style. Available in three reflective colours, the range is packed with advanced features including Plasma Quad Plus Filtration ideal for allergy sufferers, the 3D i-See Sensor for customised heating or cooling and Built-in Wi-Fi Control Energy Monitoring!

Reflect Your Design Personality

Featuring a striking flat panel design, the Black Diamond Smart Series is available in three unique reflective colour finishes – White Diamond, Red Diamond and Black Diamond, that change depending on the light in the room.
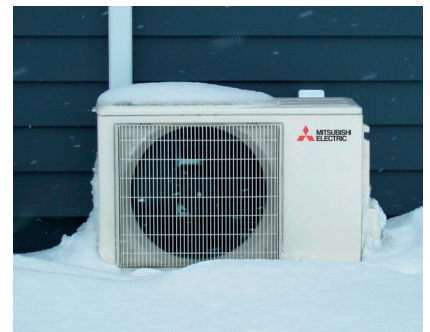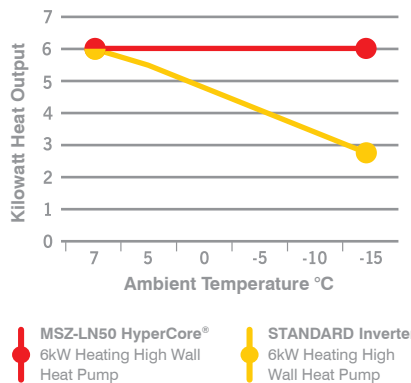
Now you can make a real interior design style statement with your heat pump colour choice.

Optional HyperCore

The Black Diamond Smart Series 2.5–5kW capacities are available with optional HyperCore Technology.

While ordinary heat pumps produce less heat below 7°C, Mitsubishi Electric HyperCore Technology guarantees to continue to deliver its full rated heating capacity right down to -15°C, so you stay warm when you need it most.
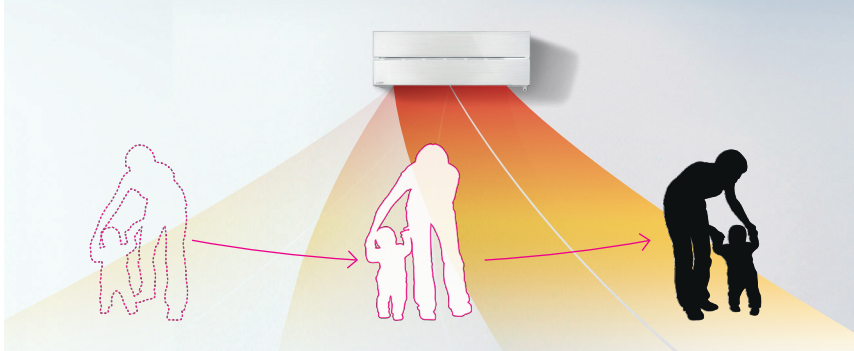

Ambient Temperature vs Heat Delivery

MSZ-LN50 HyperCore®
6kW Heating High Wall Heat Pump

STANDARD Inverter
6kW Heating High Wall Heat Pump

* The Black Diamond Series LN60 is not available with HyperCore Technology.

Black Diamond Smart

3D i-See Sensor

The 3D i-See Sensor detects the presence and position of people in the room using thermal heat recognition, adjusting the temperature and airflow pattern for optimal comfort. This helps the Black Diamond Smart Series do more than simply save energy, it also enables a new level of truly personalised comfort to be achieved.

You always feel warm and comfortable as the direct heat follows you as you move around the room.

Thermal Scan Technology

The 3D i-See Sensor continually takes a thermal scan of the room, dividing it into 752 three-dimensional zones and measuring the temperature in each zone to detect exactly where people are in a room.

Independently Controlled Dual Split Vane Airflow

Intuitively Adjusts the Airflow Direction to Where it's Needed

The 3D i-See Sensor works in conjunction with the Dual Split Vanes to provide heating or cooling to where it is needed most. As a result, it can save energy by not heating or cooling areas that don't require it. Whether you prefer direct, indirect or evenly distributed airflow, the 3D i-See Sensor and Dual Split Vanes provide the ultimate in customisable airflow.

You'll Never Feel Cold

The 3D i-See Sensor can recognise movement of an individual in a room and subsequently direct the airflow with the Dual Split Vanes; so they continue feeling warm no matter where they have moved to in the room.

Comfort for All With Multiple Airflow Directions

The 3D i-See Sensor can identify multiple people present in the room and adjust the Dual Split Vanes to direct heating or cooling evenly throughout; so everybody feels comfortable in the room.

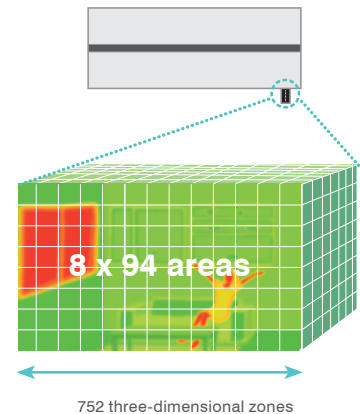Only one occupant feels direct heat.

With Dual Split Vanes both occupants feel direct heat.

Even Airflow – Airflow Only Where You Need It

With Even Airflow Mode, the 3D i-See Sensor memorises people's movements and furniture positions, efficiently distributing airflow only to where it is needed.
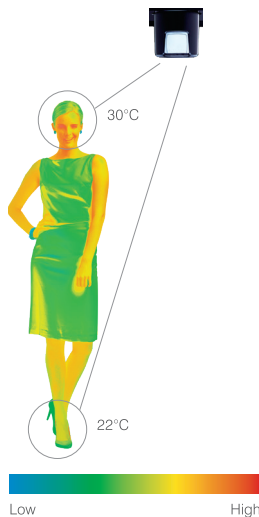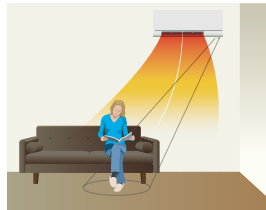

8 sensors measure while moving left to right

8 x 94 areas

752 three-dimensional zones

LN Black Diamond Smart Series

R32

i-see Sensor

30°C

22°C

Low — High

Plasma 4+ FILTRATION

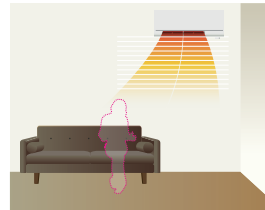**Protect Against Covid-19* + other viruses ^**
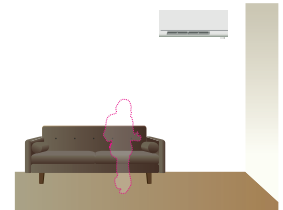
Energy Saving No Occupancy Modes

The 3D i-See Sensor detects whether or not there are people in the room, and automatically switches to one of the No Occupancy Modes, as set by the user.

The 3D i-See Sensor continuously scans the room for occupants.

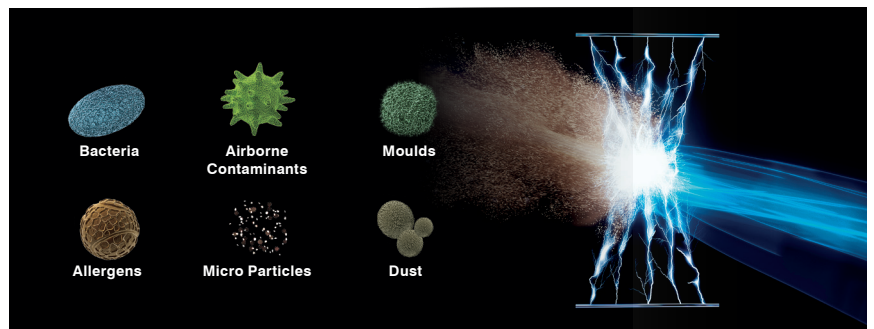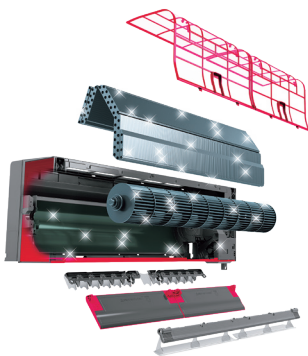In Energy Saving Mode – power is reduced when you leave the room.

In Auto-Off Mode – unit switches off when you leave the room.

In No Occupancy Energy Saving Mode when no one is in the room, the unit automatically reduces power consumption by approximately 10% after 10 minutes, and 20% after 60 minutes. In No Occupancy Auto-Off Mode, when no one is in the room, the unit turns off automatically.

Advanced Plasma Quad Plus Filtration

The advanced Plasma Quad Plus Filtration System, featuring high-performance two stage plasma technology, filters the air to clean away viruses such as Covid-19* as well as smells, dust, moulds and other common household allergens.

The Two Stage Plasma Quad Plus Filter works like an electrical curtain, using an electrical discharge to catch and neutralise even microscopically small particles in the air. In fact, it can even capture PM2.5 particles (that's up to 30 times smaller than the width of a human hair!).

Bacteria | Airborne Contaminants | Moulds

Allergens | Micro Particles | Dust

Independent test results confirm that the Plasma Quad Filtration System achieves extremely high reduction results in the removal of allergen, mould, bacteria and airborne contaminants in the room. Providing up to 98.8% effectiveness of removing airborne Covid-19* particles too, it's the ultimate peace of mind for ensuring a healthier, cleaner living environment.

Superior Energy Efficiency

Black Diamond Smart Series Heat Pumps are some of the most energy efficient heat pumps available in New Zealand.

This high energy efficiency is achieved by incorporating a large, high-density heat exchanger, an advanced high-efficiency fan motor and a next-generation compressor using the latest in super efficient R32 refrigerant.

* PQC Electrode Collection Plate, Test Chamber Lab – Test No. 20KB070569, Microbial Testing Laboratory Kobe Testing Center Japan Textile Products Quality and Technology Center.

^ Such as Influenza A virus A/Aichi/2/68 (H3N2) - tested in a 25m² room by Virus Research Center, Sendai Medical Center, National Hospital Organisation according to JEM 1467.

Black Diamond Smart

Dual Barrier Coating Maximises Efficient Performance

The patented and world's first Dual Barrier Coating from Mitsubishi Electric prevents dust and dirt from accumulating on the inner surface of the indoor unit; keeping your heat pump clean year-round.

Keeping key internal components like the heat exchanger, fan and internal duct clean is important for both home comfort and efficiency. Not only does dust and dirt build-up typically create unpleasant odours, it also forces a heat pump to work harder, which can result in significantly impaired energy efficiency.

Dual Barrier Coating prevents dust and oil build-up on the interior of the heat pump for the ultimate in peace of mind, ease and comfort.

More Environmentally Friendly R32 Refrigerant

With a global warming potential that is 30% lower compared to older refrigerants such as R410A, next-generation R32 refrigerant has a much lower environmental impact. Furthermore, zero ozone depleting R32 is easier to reuse and recycle.

Blue Fin Coating – Built to Withstand the Elements

The heat exchanger of the outdoor unit has been treated with Blue Fin Anti-Corrosion Treatment, slowing the corrosion process caused by salt and sulphur in the air especially in coastal and high sulphur areas.

Quiet Operation

Black Diamond Smart indoor units feature Silent Mode – a fan speed setting that provides quiet operation as low as 19dBA* so you will feel the warmth, not hear it.

7-Day Programmable Controller

All Black Diamond Smart Series Heat Pumps feature a built-in weekly timer, allowing you to program up to four time and temperature settings for each day of the week. You can now return to comfort without having to manually adjust the temperature. Perfect for anyone with a busy lifestyle, the 7-Day Controller is a great way to regulate your energy usage without compromising on comfort.

Built-in Wi-Fi Control Energy Monitoring

With Built-in Wi-Fi Control you can pre-heat or cool a room no matter where you are. On the way home, running late, coming home early, or even when you're in a different country, with Wi-Fi Control you'll always arrive home to total comfort.

The intuitive app also features Energy Monitoring, allowing you to track indicative energy use so you can make more energy efficient choices when heating and cooling your space.

Dimensions (WxDxH): 890 x 233 x 307mm

MSZ-LN25VG2V/B/R*
Heating Capacity: 3.2 kW | Cooling Capacity: 2.5 kW

MSZ-LN35VG2V/B/R*
Heating Capacity: 4.0 kW | Cooling Capacity: 3.5 kW

MSZ-LN50VG3V/B/R*
Heating Capacity: 6.0 kW | Cooling Capacity: 5.0 kW

MSZ-LN60VG3V/B/R
Heating Capacity: 6.8 kW | Cooling Capacity: 6.1 kW

** HyperCore option available.

from 19dBA*

BUILT-IN Wi-Fi CONTROL

energy MONITORING

* LN 25/35 indoor sound level on the lowest fan setting.

LN Black Diamond Smart Series Specifications

			MSZ-LN25	MSZ-LN35	MSZ-LN50	MSZ-LN60	MSZ-LN25HZ	MSZ-LN35HZ	MSZ-LN50HZ
TYPE			High Wall System						
SERIES			LN Black Diamond Smart Series				LN Black Diamond Smart Series with HyperCore		
MODEL			MSZ-LN25	MSZ-LN35	MSZ-LN50	MSZ-LN60	MSZ-LN25HZ	MSZ-LN35HZ	MSZ-LN50HZ
REFRIGERANT			R32						
INDOOR UNIT			MSZ-LN25VG2	MSZ-LN35VG2	MSZ-LN50VG3	MSZ-LN60VG3	MSZ-LN25VG2	MSZ-LN35VG2	MSZ-LN50VG3
OUTDOOR UNIT			MUZ-LN25VG2	MUZ-LN35VG2	MUZ-LN50VG3	MUZ-LN60VG2	MUZ-LN25VGHZ2	MUZ-LN35VGHZ2	MUZ-LN50VGHZ2

QUICK GLANCE

		MSZ-LN25	MSZ-LN35	MSZ-LN50	MSZ-LN60	MSZ-LN25HZ	MSZ-LN35HZ	MSZ-LN50HZ
COOL		2.5kW 5.10 EER 19 dBA*	3.5kW 4.27 EER 19 dBA*	5.0kW 3.62 EER 27 dBA*	6.1kW 3.53 EER 29 dBA*	2.5kW 5.10 EER 19 dBA*	3.5kW 4.27 EER 19 dBA*	5.0kW 3.62 EER 27 dBA*
HEAT		3.2kW 5.33 COP 19 dBA*	4.0kW 4.88 COP 19 dBA*	6.0kW 4.05 COP 25 dBA*	6.8kW 3.78 COP 29 dBA*	3.2kW 5.33 COP 19 dBA*	4.0kW 4.88 COP 19 dBA*	6.0kW 4.00 COP 25 dBA*

ZERL STAR RATINGS

	MSZ-LN25		MSZ-LN35		MSZ-LN50		MSZ-LN60		MSZ-LN25HZ		MSZ-LN35HZ		MSZ-LN50HZ	
(NZ) Cold Area	5.0	3.0	4.5	3.0	3.5	2.0	3.0	2.0	5.0	3.0	4.0	3.0	3.5	2.5
Avge Area‡	4.5	3.5	4.0	3.5	3.5	2.5	3.0	2.5	4.5	3.5	4.0	3.5	3.0	2.5
Hot Area‡	5.0	4.0	4.5	3.5	3.5	3.0	3.0	3.0	5.0	4.0	4.0	3.5	3.5	3.0

COOL

			MSZ-LN25	MSZ-LN35	MSZ-LN50	MSZ-LN60	MSZ-LN25HZ	MSZ-LN35HZ	MSZ-LN50HZ
Capacity	Rated	[kW]	2.5	3.5	5.0	6.1	2.5	3.5	5.0
	Min-Max	[kW]	1.0-3.5	0.8 -4.0	1.0 -6.0	1.4 - 6.9	0.8 - 3.5	0.8 - 4.0	1.4 - 5.8
Total Input	Rated	[kW]	0.49	0.82	1.38	1.73	0.49	0.82	1.38
EER/AEER			5.10 / 5.07	4.27 / 4.25	3.62 / 3.61	3.53 / 3.52	5.10 / 5.07	4.27 / 4.25	3.62 / 3.61
Indoor Sound Level	Quiet	[dBA]	19	19	27	29	19	19	27
	Low-SHi²	[dBA]	23-29-36-42	24-29-36-43	31-35-39-46	37-41-45-49	23-29-36-42	24-29-36-43	31-35-39-46
Running Current (Rated)		[A]	2.7	3.8	6.3	7.8	2.5	3.8	6.3
Air Volume In (SHi¹)		[L/s]	207	217	232	262	207	217	232

HEAT

			MSZ-LN25	MSZ-LN35	MSZ-LN50	MSZ-LN60	MSZ-LN25HZ	MSZ-LN35HZ	MSZ-LN50HZ
Capacity	Rated	[kW]	3.2	4.0	6.0	6.8	3.2	4.0	6.0
	Min-Max	[kW]	0.7 - 5.4	0.9 - 6.3	1.0 - 8.2	1.8–9.8	0.8–6.3	0.9–7.0	1.8–9.0
	@-15°C	[kW]	-	-	-	-	3.2	4.0	6.0
Total Input	Rated	[kW]	0.6	0.82	1.48	1.80	0.60	0.82	1.50
COP / ACOP			5.33 / 5.30	4.88 / 4.86	4.05 / 4.04	3.78 / 3.77	5.33 / 5.30	4.88 / 4.86	4.00 / 3.99
Indoor Sound Level	Quiet	[dBA]	19	19	25	29	19	19	25
	Low-SHi²	[dBA]	24-29-38-45	24-29-38-45	29-35-43-47	37-41-45-49	24-29-38-45	24-29-38-45	29-35-43-47
Running Current (Rated)		[A]	3.4	3.8	6.8	7.9	3.0	3.8	6.8
Air Volume In (SHi¹)		[L/s]	232	232	255	263	232	232	255

			MSZ-LN25	MSZ-LN35	MSZ-LN50	MSZ-LN60	MSZ-LN25HZ	MSZ-LN35HZ	MSZ-LN50HZ
Controller	Standard		Premium LN 7-Day Programmable Controller and Wi-Fi Control						
	Optional Wired 7-Day Timer		Optional: PAR Controller (Interface Required)						
Wi-Fi			Built-In with Energy Monitoring						
Power Supply	(Powered From Outdoor Unit)		230 V / Single Phase / 50 Hz						
	Maximum Current	[A]	7.1	9.9	13.8	15.2	9.9	10.5	15.1
Indoor	Dimensions (WxDxH)	[mm]	890 x 233 x 307				890 x 233 x 307		
	Weight	[kg]	15.5	15.5	16.0	16.0	15.5		16.0
Outdoor	Dimensions (WxDxH)	[mm]	800 x 285 x 550	800 x 285 x 550	800 x 285 x 714	840 x 330 x 880	800 x 285 x 550		840 x 330 x 880
	Weight	[kg]	33	34	40	53	34		55
	Sound Level - SPL³/Power (Cooling-Heating)	[dBA]	46-49 / 60-61	49-50 / 61-62	51-54 / 64-66	55-55 / 65-69	46-49 / 60-61	49-50 / 61-62	51-55 / 64-66
Piping	Diameter (Liquid/Gas)	[mm]	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52
	Max. Length/Height†	[m]	20 / 12	20 / 12	30 / 12	30 / 15	20 / 12	20 / 12	30 / 15
	Chargeless Piping Length	[m]	10	10	15	7	10	10	7
Operation Range Outdoor	Cooling	[°C]	–10 /+46				–10 /+46	–10 /+46	–10 /+46
	Heating	[°C]	–15 /+24				–25 /+24	–25 /+24	–25 /+24
Indoor Unit Colour			Black Diamond / Red Diamond / White Diamond						

ZERL = Zoned Energy Rating Label
EER = Energy Efficiency Ratio
COP = Coefficient of Performance
AEER = Annual Energy Efficiency Ratio
ACOP = Annual Coefficient of Performance
SPL = Sound Pressure Level
[1] SHi = Super High-
[2] Low–SHi = Low–Medium–High–Super High

[3] SPL measured under rated operating frequency
* Indoor Sound Levels rated at lowest fan speed.
† Maximum length is inclusive of height differential i.e. (20/12) means the pipe can be 12m high and 8m across for a total length of 20m.
‡ Avge/Hot are Australia only.
Rating Conditions (AS / NZS 3823).
Cooling: Indoor: 27°C DB, 19°C WB. Outdoor: 35°C DB.
Heating: Indoor: 20°C DB Outdoor: 7°C DB, 6°C WB.

SCAN ME!

Learn more about the Black Diamond Smart Series

For more information please visit our website or call our Customer Service Team.
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MITSUBISHI ELECTRIC