

redge[®]

e-Lite

VRF Commercial Air Conditioners



8 - 270 kW
3 - 96 HP



- # The Energy Management System (EMS) allows a perfect adjustment of the evaporating and condensing temperatures for **maximised comfort and energy efficiency**.
- # The integration of cutting-edge technologies guarantees the units' optimal performance even under the harshest climates and environments, thus ensuring the installation's **robustness** in the long run.
- # Available in wall mounted, four-way cassette or floor standing configurations, the e-Lite indoor units **perfectly suit many applications** from office buildings to retail environments of all sizes.
- # Every indoor unit contains smart features to provide **optimal comfort** and increase **efficiency**.

PRECISION COOLING

- # 40% to 100% cooling capacity modulation thanks to inverter compressors.

STEADY PERFORMANCE

- # The automatic refrigerant detection prevents fluctuations and ensures a constant level within the unit.

TOP PROTECTION

- # The innovatively designed auto snow-blowing & dust-clean functions prevent the accumulation of snow and dust on the outdoor unit.

REDUCED ENERGY CONSUMPTION

- # All indoor units feature DC fans for maximum energy efficiency.

PERFECT AIRFLOW

- # Thanks to the 5 swing angles for indoor unit louvres, the air flow direction can be controlled more precisely.

QUIET OPERATION

- # The low sound operation fan motor and optimized fan blades guarantee the air discharges smoothly and provides a quiet living environment.



WIDE OPERATING RANGE

- # The outdoor units operate in a wide ambient temperature range:
From -5°C to 48°C in cooling mode and from -25°C to 24°C in heating mode → LV-XSO, LV-SO series
From -15°C to 55°C in cooling mode and from -30°C to 30°C in heating mode → LV-XEO, LV-EO series

INCREASED REFRIGERANT SUBCOOLING

- # +10% energy efficiency thanks to the integration of the Plate Heat Exchanger as a secondary intercooler.

HIGH RELIABILITY

- # The precise oil control technology eliminates any compressor oil shortage problems and thus ensures the system's smooth operation.

EXTENDED LIFESPAN

- # Outdoor units are given as standard an anti-corrosion treatment for non-extreme conditions and can also be customized with heavy anti-corrosion treatment on main components for surface protection against corrosive air, acid rain and saline air (for installations in coastal regions) to extend the overall lifetime .

IDEAL INDOOR TEMPERATURE

- # The DC Inverter fan motor adjusts the airflow based on thermal load instantly providing less temperature fluctuation and an improved living environment.



BENEFITS OF REDGE VRF

Benefits for End-users	Benefits for Building Owners	Benefits for Consultants	Benefits for Construction Companies
Healthy Operation	Energy Saving Management	Diversified Solutions	Green Solutions
Cost Saving Operation	Reliable Operation	Professional Tool and Support	Space Saving Design
Comfortable Environment	Backup Solution	Design Flexibility	Intelligent Management

APPLICATION SOLUTIONS

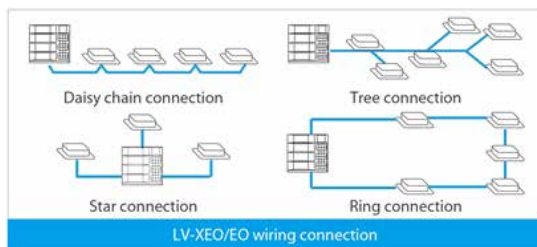
High-rise office building	Shopping Malls	Hotels	Villas	Schools
Small and medium-sized office buildings	Retails	Apartments	Hospitals	Airports

	TYPE	PICTURE	CAPACITY RANGE (kW)	KEY TECHNOLOGIES
AIR COOLED- HEAT PUMP	LV-XSO / LV-SO – Top Discharge		LV-XSO 25,2 - 270,0* LV-SO 25,2 - 90	# R410A refrigerant # Wide capacity range # Full inverter compressors # Full DC fan motors # Precise oil control # Anti-corrosion protection # Intelligent defrosting technology # Multiple priority modes # Auto addressing
	LV-MSO – Side Discharge		20,0 ~ 33,5	
	LV-MEO / LV-XMEO – Side Discharge		LV-MEO 25,2 - 61,5 LV-XMEO 25,2 - 200*	# R410A refrigerant # Wide capacity range # Full DC Inverter Technology # Precise oil control # Advanced Subcooling Technology # Intelligent defrosting technology # 10 priority modes # Auto addressing # Low Standby Power Consumption # 60-step Energy Management # Fan and sensors backup # Advanced Silent Technology # Long Piping Capability # HyperLink: arbitrary Topology Communication # Refrigerant Amount Diagnosis # Enhanced Vapor Injection (EVI) Compressor
	LV-XEO / LV-EO – Top Discharge		LV-XEO 25,2 - 270,0* LV-EO 25,2 - 90	
	LV-MO2C – MINI VRF		8,0 - 18,0	# R410A refrigerant # Wide capacity range # Wide Operation Range # Long Piping Capability # Full DC Inverter Technology # High Efficiency # Anti-corrosion Protection # Refrigerant Cooling PCB # Intelligent Defrosting
	LV-MOEC – MINI VRF		8,0 - 18,0	# R410A & R32 refrigerant # Support Any Topology Communication # Super Anti-interference Capability # Virtual Sensor Backup # Full DC Inverter Technology # Advanced Subcooling Technology # 60-step Energy Management # Precise Oil Control # Anti-corrosion Protection # Advanced Silent Technology
AIR COOLED- HEAT RECOVERY	LV-RSO – Top Discharge		22,4 - 150,0	# R410A refrigerant # Wide capacity range # Full inverter compressors # Full DC fan motors # Precise oil control # Anti-corrosion protection # Intelligent defrosting technology # Multiple priority modes # Auto addressing

* Possibility to combine outdoor units

HYPERLINK

Redge original communication bus chip greatly simplifies installation and saves installation cost. HyperLink communication technology supports any wiring pattern rather than just daisy chain connection, reducing the installation cost and the possibility of incorrect connection. It has stronger anti-interference ability, achieving communication distance up to 2000m. Support Any Topology Communication



SHIELDBOX

IP55 fully enclosed electric control box provides all-round protection for internal electronic components, greatly improving system RELIABILITY.



SUPERSENSE

Up to 19 sensors are distributed throughout the refrigerant system, and the status of the refrigerant is known anywhere throughout the process, ensuring stable operation. At the same time, combined with the digital twin technology of the refrigerant system, a virtual sensor can be created in the event of a physical sensor failure, so that the system does not shut down in the event of a sensor failure, ensuring comfort.



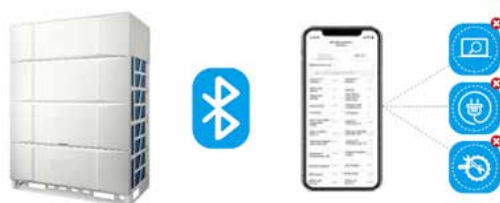
REFRIGERANT AMOUNT DIAGNOSIS

Thanks to the complete sensors, the refrigerant running state is clearly visible, so as to accurately diagnose the amount of refrigerant.



DOCTOR M 2.0

Based on a cloud-based platform of big data and artificial intelligence, the Redge Series VRF can monitor the operation status of each unit in real time, predict system faults in advance and provide data analysis for system maintenance. Intelligent Bluetooth module and special Bluetooth after-sales kit can further simplify maintenance and improve maintenance efficiency.



FREE CONTROL



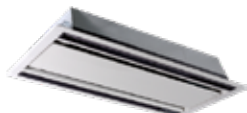
Redge VRF can provide different control solutions for different application scenarios. From small homes and convenience stores to large shopping malls and complex buildings, Redge VRF can provide the most appropriate control solutions to achieve centralized and customized management.



3DC Indoor units

One-way Cassette	Two-way Cassette	Compact Four-way Cassette	Four-way Cassette	Arc Duct	Medium Static Pressure Duct
					
1.8-7.1kW, 7 models	2.2-7.1kW, 6 models	1.5-6.3kW, 7 models	2.8-16kW, 11 models	1.5-11.2kW, 10 models	1.5-16kW, 13 models
High Static Pressure Duct	Wall Mounted	Ceiling & Floor	Floor Standing	Floor Standing	Fresh Air Processing Unit
					
7.1-56kW, 12 models	1.5-9kW, 9 models	3.6-14kW, 8 models	2.2-7.1kW, 6 models	22.4/28kW, 2 models	11.2-56kW, 8 models

2DC/2AC Indoor Unit

One-way Cassette	Two-way Cassette	Compact Four-way Cassette	Four-way Cassette	Medium Static Pressure Duct
				
1.8-7.1kW, 7 models	2.2-7.1kW, 6 models	2.2-4.5kW, 5 models (DC) 1.8-4.5kW, 5 models (AC)	2.8-16kW, 11 models (DC) 2.8-14kW, 10 models (AC)	2.2-16kW, 11 models (DC) 2.2-14kW, 10 models (AC)
High Static Pressure Duct	Wall Mounted	Ceiling & Floor	Floor Standing	Fresh Air Processing Unit
				
7.1-56kW, 12 models	1.5-9kW, 9 models	3.6-16kW, 9 models (DC) 3.6-14kW, 8 models (AC)	2.2-7.1kW, 6 models	11.2-56kW, 8 models

360° AIRFLOW

New design, round air flow path ensures uniform air flow and temperature distribution.



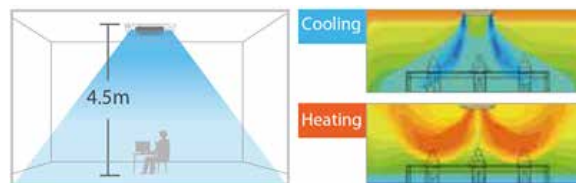
INDIVIDUAL LOUVER CONTROL

The Individual louver control can control the motors separately, making it possible to control all four louvers independently.



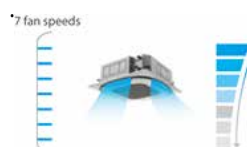
LONG DISTANCE AIR DELIVERY

The Four-way Cassette has an additional 50Pa static pressure for long airflow delivery and is capable of being used in spaces up to 4.5m in floor height.



7 FAN SPEEDS

7 indoor fan speed options to meet the needs of different indoor conditions.



SLEEP MODE

The smart sleep mode provides a comfortable sleep period and a refreshing wake up time.



INNOVATIVE PURO-AIR KIT

Protectors of health and safety

OSRAM From Germany - OSRAM quality UV light source



1st The world's first air conditioning sterilization product certification

99.9% Effective killing rate of white grape fungus

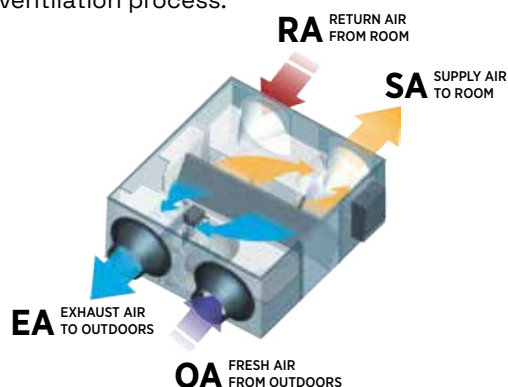
99.9% Effective killing rate of H1N1

98% Effective killing rate of natural bacteria

CE Ozone-Free
UV leakage-Free

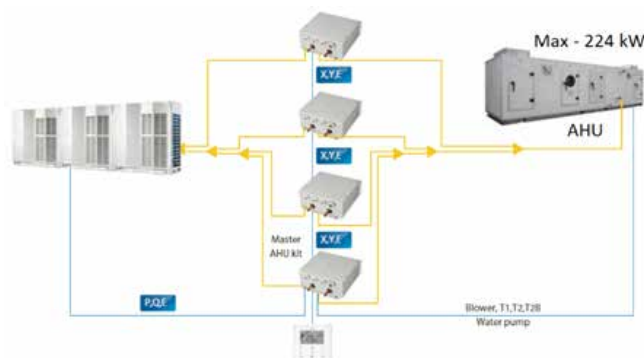
ADDITIONAL ACCESSORIES

The heat recovery ventilator (LV-REC) can greatly reduce energy loss and room temperature fluctuations caused by the ventilation process.



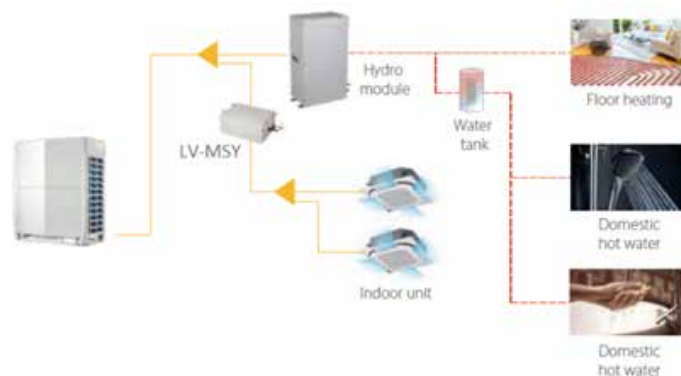
VRF DX AHU CONTROL BOX - AHU

Control Box facilitates raising the EER/COP of the complete AHU system.



HOT WATER SUPPLY

The LV-RSO system can produce hot water (25°C to 80°C) when providing room air conditioning. The hot water can be used for space heating and domestic hot water, improving room comfort.



DIAGNOSIS SOFTWARE - REDGE VRF

Diagnosis Software tool is used to monitor VRF systems and diagnose system errors.

System settings and operating parameters can be accessed easily and data logs can be reviewed for fault prevention purposes.

- # Advance Control
- # Parameter setting and List
- # New Refrigerant System Diagram
- # Device Firmware version query and firmware upgrade
- # Dynamic system diagram only available for specific ODU series
- # Support 12 more languages.





NEXT LEVEL
HVAC SOLUTIONS