



## Product Solution

VCR series variable frequency  
air-cooled precision air conditioner



INVT NETWORK POWER (SHENZHEN) CO.,LTD.

**invt**

Stock code: 002334

---

## Company Profile

Shenzhen INVT Network Power (Shenzhen) Co., Ltd. is a subsidiary of Shenzhen INVT Electric Co., Ltd. (stock code: 002334). Focus on the R&D, production and application of integrated solutions for key infrastructure of data centers. Empower the construction of informatization and provide a safe, reliable, technologically advanced, intelligent, flexible, green, energy-saving, and economical and applicable data center key infrastructure "base" for data transmission, calculation, and storage.

Focusing on R&D and production of micro-modules, environmental refrigeration, and intelligent monitoring, integrating power distribution, UPS, batteries, etc., to provide you with four "Smart" series of integrated data center solutions. According to the relevant standards of GB50174 and TIA-942, the standardized and modular design is fully adopted to realize the advantages of rapid deployment, flexible expansion, intelligent operation and maintenance, and green efficiency.

Our team has more than 15 years of experience in the data center industry and has a thorough understanding of the data industry. Rich experience in research and development, strong technical capabilities, and advanced technical concepts. It has advanced informatization and intelligent supply chain management methods and service capabilities such as MES production, ERP planning, OA office, PDM data management, CRM customer relations, and TMS logistics management.

We will "make every effort to provide value-for-money products and services, and make customers more competitive" as our mission.



# 12.5-60kW Air-cooled Variable Frequency In-row Air Conditioner

VcolRow series in-row computer room air conditioner is kind of intelligent temperature control product especially suitable for modular data center. It is usually deployed in the cabinet arrangement, installed side by side with the server cabinet, combined with enclosed hot and cold aisle, close to the heat source and efficient cooling, creating an ideal operating environment for the key infrastructure of the data center.



# Why do you choose our products?



## High reliability

- ⚙ High-quality components
- ⚙ High-intensity test certification
- ⚙ High stability system



## High efficiency and energy saving

- ⚙ Full variable frequency design
- ⚙ High return wind design
- ⚙ High-efficiency configuration



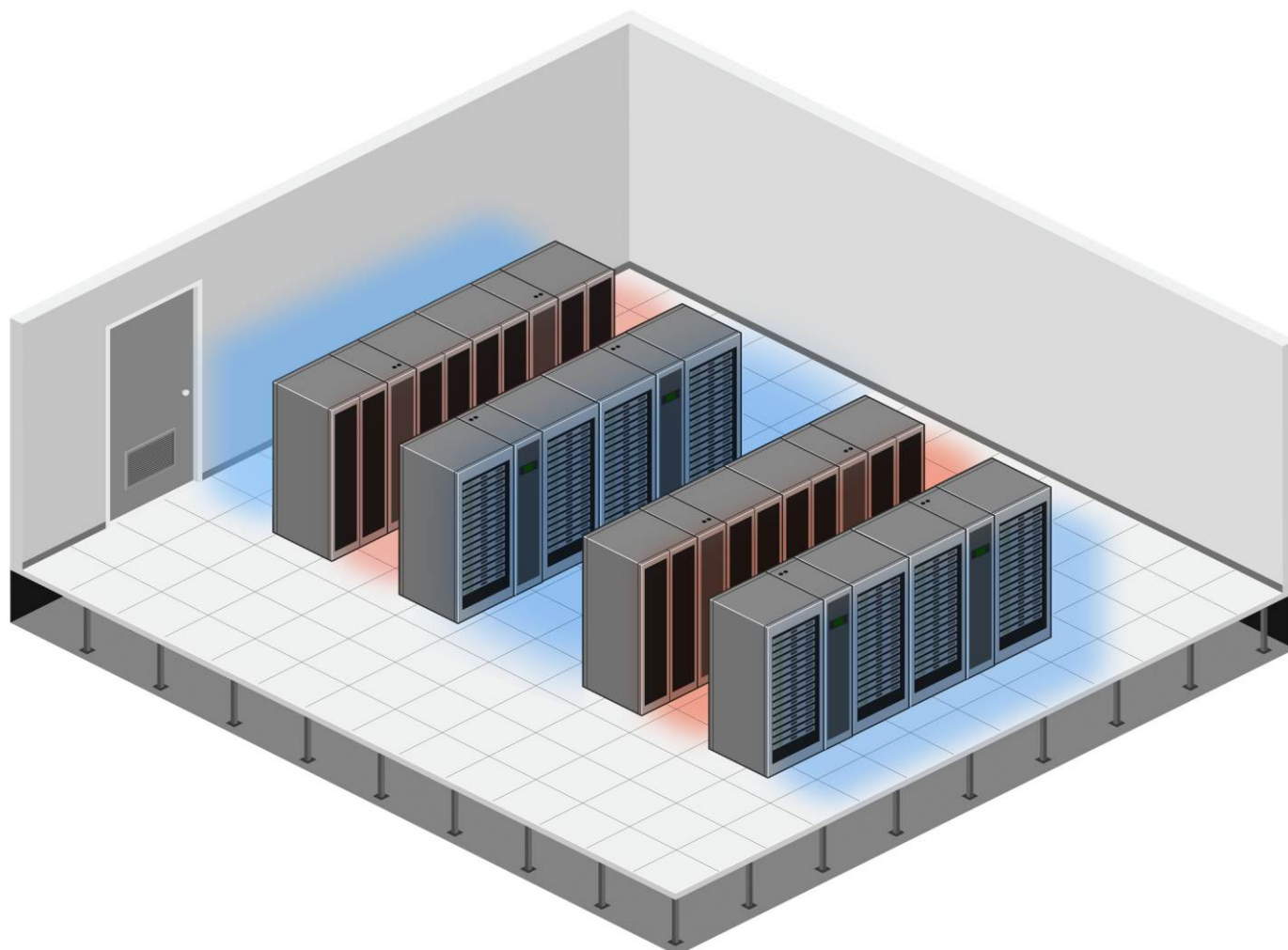
## Intelligent management

- ⚙ Multiple intelligent control modes
- ⚙ Multiple password protection
- ⚙ Standard 7-inch true color touch screen



## Diversified configuration

- ⚙ Wide cooling range
- ⚙ Multiple airflow supply types optional
- ⚙ Optional dual power input



## High reliability



### High-quality components

All components comply with domestic and international standardized production standards to ensure product quality.

### High stability system

High-reliable full frequency control, start-up current less than rated current, small impact of the power grid.

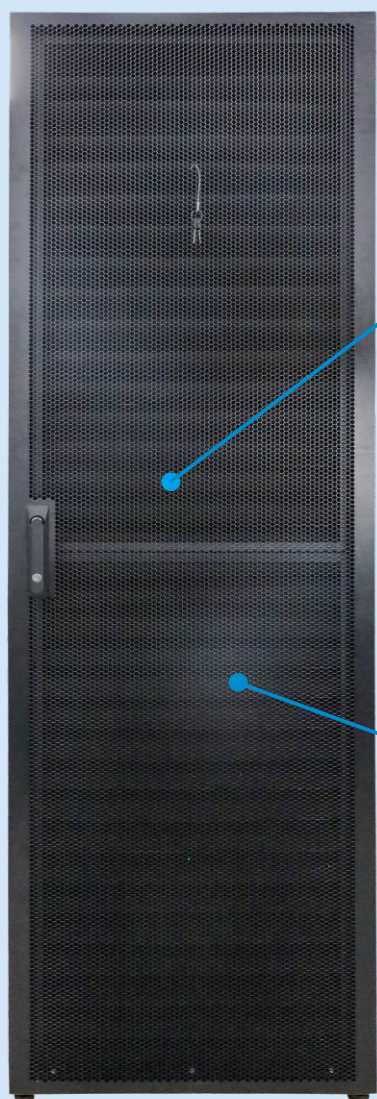
### High-intensity test certification

Factory prefabrication, pre-installation, pre-commissioning and other links are controlled layer by layer to ensure safe and reliable product installation and operation.



## High efficiency and energy saving

VcolRow series in-row air conditioners have the ability to accurately control temperature and humidity, and use efficient components to ensure the efficient and energy-saving operation of the air conditioner.



### Evaporator ▼

Adopt two-stage evaporator, can increase the refrigeration area, and increase the water tray in the middle, can effectively prevent blowing water.



### Turbocompressor ▼

Adopt variable frequency scroll compressor that has 20%~100% dynamic adjustment of cooling capacity output. It has superior resistance to liquid impact and low noise and vibration level, and has long life.



## High efficiency and energy saving

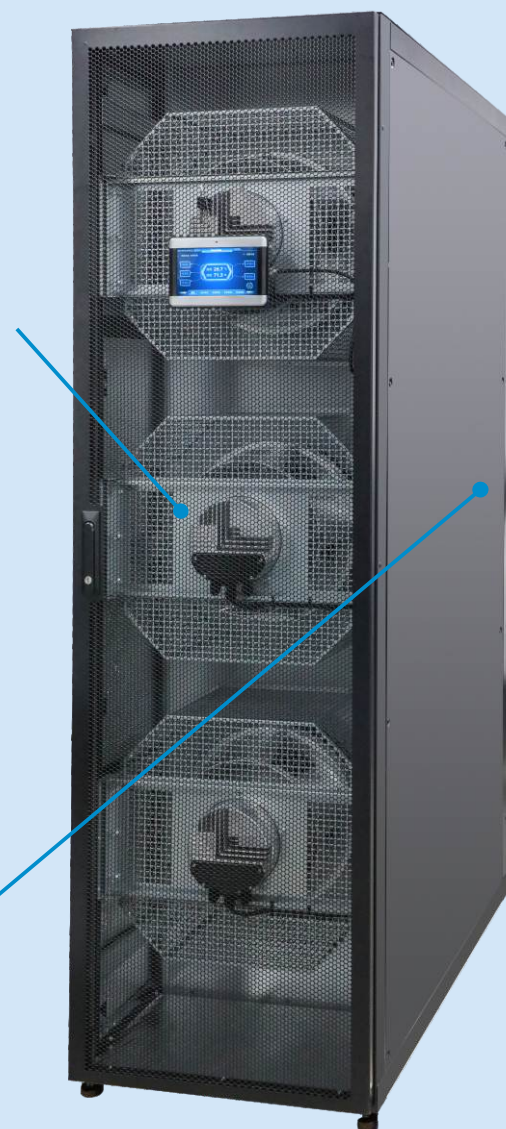
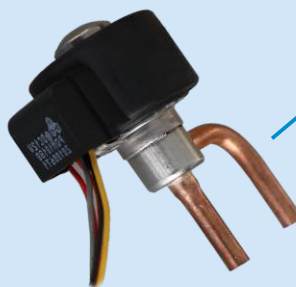
### EC Fan ▼

High efficiency EC backward tilt centrifugal fan, means lower consumption, less maintenance, better air distribution brings improved cooling efficiency, and it can adjust the speed output according to the real-time heat load change, to achieve the maximum energy saving operation.



### Electronic expansion valve ▼

The use of electronic expansion valve, has fast response speed, can quickly stabilize the working conditions, as well as accurate control of refrigerant flow, with variable frequency compressor to achieve energy saving.



# Intelligent management

VcolRow series in-row air conditioners use 7-inch color capacitive touch screen, its page is beautiful and easy to operate. And the in-row air conditioners have three-level password protection, hierarchical authorization management, as well as have multiple intelligent control modes and support multiple protocol.



Support 64 units for CAN communication networking



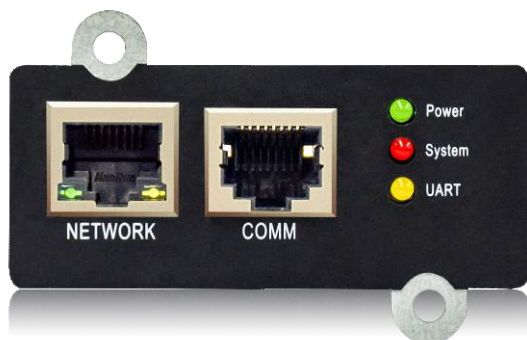
Support graphic status and temperature and humidity curve display



Standard Rs485 interface, support optional SNMP interface



Support 10 temperature sensors







## Diversified configuration

VCR series in-row air conditioner adopts modular structure design, covers a small area, supports modular split, easy to maintain. And it has flexible component options for a wide variety of data centers.



- ▶ Optional dual power input
- ▶ Optional extension components
- ▶ High cooling density, maximum cooling capacity of 60kW, the maximum cooling capacity of the half cabinet is 35kW.
- ▶ Standard electrode humidifier, support for the optional wet film humidifier
- ▶ Optional delivery style grille to meet the left and right air demand
- ▶ Optional fluorine pump natural cooling module to make full use of free natural cold source



## Specification ▼

	Unit	VCR012	VCR025	VCR030	VCR040	VCR050	VCR060
Unit Configuration	-	Refrigeration type/Constant Temperature & Humidity type					
Total cooling capacity	kW	12.5	25.5	30.8	42.8	51.5	62.7
Sensible cooling capacity	kW	12.5	25.5	30.8	42.8	51.5	62.7
Air volume	m <sup>3</sup> /h	2800	5000	5200	8500	10500	11500
Heating capacity	kW	3	4.5	4.5	6	6.5	6.5
Humidifying capacity	kg/h	1.5	3	3	3	3	3
Compressor type	-	DC inverter compressor	Scroll compressor				
Refrigerant type	-	R410A					
Width	mm	300	300	300	600	600	600
Depth	mm	1100/1200	1100/1200	1100/1200	1100/1200	1100/1200	1100/1200
Height	mm	2000	2000	2000	2000	2000	2000

- Test condition: The indoor dry-bulb temperature is 37°, and the relative humidity is 24%.

## Applicable Scene ▼

- Modular data center



- Container data center



- High heat density data machine room



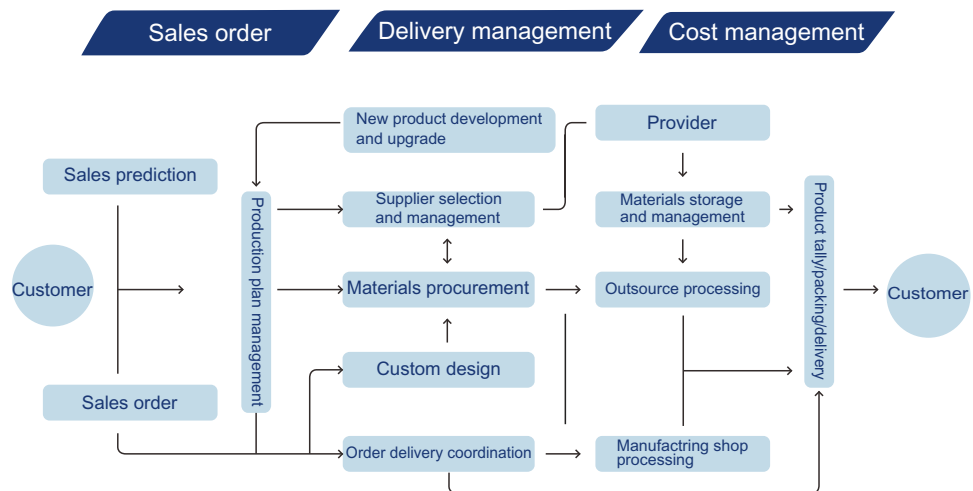
- Small and medium-sized data center



# Integrated Service System

## Excellent operation management ▼

Process-based standardized management realizes high-efficiency, quality and cost management.



Implement a fully integrated service system, with customer demand as the starting point, customer satisfaction as the end point, and carry out product life cycle control.

