



# 风冷机架空调 Rack air conditioner

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## 产品介绍

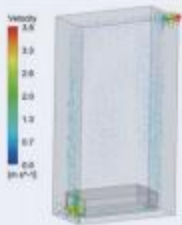
针对小微型或分布式的IT机柜、机房、数据中心等边缘计算部署场景，海悟在小型精密空调系列的基础上、衍生开发出CDA风冷机架空调。该产品能效高、耗电低，体积小，安装使用简单，紧贴热源放置在柜内架上，能够精确处理机柜内服务器产生的高显热，有效防止局部热点产生，特别符合5G时代单柜、多柜等高热密度应用环境。



## 核心部件

### ● 高性能组件，消除“热点”风险

三面送风设计，有效防止“局部热点”产生，机组安装后，可实现左侧、右侧、顶部三面送风，局部热点消除在萌芽阶段。



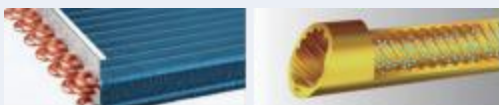
### ● 后倾式EC离心风机

采用后倾式EC离心风机，将新制造工艺及新材料完美运用到核心部件上，气动性能大大增强，具有寿命长，振动小，噪音低的特点。



### ● 高效铜管换热器，耐用更节能

采用高效制冷盘管设计，亲水膜铝箔低压损翅片和内螺纹铜管完美结合，并且采用CFD辅助优化设计，使换热器的换热效率大大提升，耐用更节能。



### ● 优质电子膨胀阀，控制精确

PID超精准控制技术，完美匹配变频压缩机和EC风机，精确调节制冷剂循环流量，使设备在全生命周期运行更平稳，综合节能达1%。





## 产品特点

- 全变容量设计，能效比可达3.5
- 极致空间利用效率，更多用户可用U位空间
- 强排水泵组件，杜绝柜内“水患风险”
- 微电脑智能控制系统，实时监控
- 智能控制，可实现提前预警
- 室内/外机均预装快速接头，出厂预充制冷剂，现场免焊接安装



400mm深度机架式空调



760mm深度机架式空调



稳定可靠  
长寿命



节能环保



提前预警



极简安装



严丝合缝



超

## 产品参数

型号规格	1.5匹(3.5kw)	2匹(5.0kw)	3匹(7.5kw)	5匹(12.5kw)
整机型号	TAR 0004	TAR 0005	TAR 0008	TAR 0013
功能	单冷+加热/恒温恒湿			
760深度版 (W×D×H)(mm)	443×715×218	443×715×218	443×715×351	443×715×440
功能	单冷+加热			
400深度版 (W×D×H)(mm)	444×395×352	444×395×352	444×395×529	/
额定制冷量 (kW)	3.5	5	7.5	12.5
风量(m <sup>3</sup> /h)	800	1100	1650	2200
最大运行电流 (整机)(A)	11.5	16.5	20	35
电源规格	220V1Ph/50Hz			
加热组件 (kW)	1	1	1	2
加湿组件 (kg/h)	1	1	1.5	3
外机尺寸 (W×D×H)(mm)	794×310×537	794×310×537	1045 ×431×760	1045 ×431 ×1375
760深度版内机重量 (kg)	27	28	36	42
400深度版内机重量 (kg)	25	26	36	/
外机重量 (kg)	30	34	60	85
强排水组件	标配			
低温启动组件	可选配			

备注:

- 1、标准工况为室内环境35℃,湿球温度为20℃,室外环境温度为35℃。
- 2、760深度机架式空调适配1000mm-1400mm深度机柜；400深度机架式空调适配600mm-800mm深度机柜。
- 3、以上表格仅为部分参数，具体配置以实际购买铭牌为准，如需了解更多产品信息请联系苏州酷克温控科技有限公司。

# Air-cooled Rack Air Conditioners



## Product Introduction

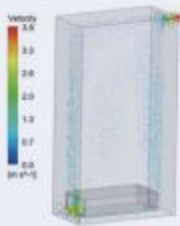
For small or distributed IT cabinets, server rooms, and data centers, Haiwu has developed the CDA air-cooled rack air conditioner based on its small precision air conditioning series. It's energy-efficient, low-power, compact, and easy to install, placed close to heat sources inside cabinets. It precisely manages high sensible heat from servers, preventing local hotspots, ideal for high-density applications in the 5G era



## Core Components

- "hotspot" risks elimination

Tri-face air supply design prevents local hotspots, with left, right, and top air delivery from the unit upon installation



- EC Centrifugal Fans

Uses rear-inclined EC centrifugal fans with new manufacturing and materials for enhanced aerodynamics, long life, low vibration, and quiet operation



- High-efficiency copper heat exchanger

High-efficiency cooling coil design with hydrophilic aluminum foil and threaded copper tubes, optimized by CFD, enhances heat exchange efficiency for durability and energy savings



- Precise electronic expansion valve

PID ultra-precision control technology perfectly matches variable frequency compressors and EC motors, accurately regulating refrigerant flow for smoother operation and up to 1% energy savings over the device's lifespan





## Product Features

- Full-capacity design with an energy efficiency ratio up to 3.5.
- Maximizes space efficiency for more user-available U-space.
- Strong water pump components eliminate cabinet water hazards.
- Microcomputer intelligent control system for real-time monitoring and early warning.
- Indoor and outdoor units pre-installed with quick connectors, pre-charged with refrigerant for non-welding installation on-site.



400mm深度机架式空调



760mm深度机架式空调



Stable and reliable



Energy-saving and eco-friendly



Early Warning



Minimalist installation



Precision Fit



Ultra-long lifespan

## Product Specification

Model/Spec	3.5kw	5.0kw	7.5kw	12.5kw
Model	TAR 0004	TAR 0005	TAR 0008	TAR 0013
Function	Cooling + heating/constant temperature and humidity			
760 Depth (W×D×H)(mm)	443×715×218	443×715×218	443×715×351	443×715×440
Function	Cooling + heating			
400 Depth (W×D×H)(mm)	444×395×352	444×395×352	444×395×529	/
Max Cooling Capacity (kW)	3.5	5	7.5	12.5
Air Flow (m <sup>3</sup> /h)	800	1100	1650	2200
Max Operating Current (A)	11.5	16.5	20	35
Power Supply	220V1Ph/50Hz			
Heater (kW)	1	1	1	2
Humidification (kg/h)	1	1	1.5	3
Dimensions (W×D×H)(mm)	794×310×537	794×310×537	1045 ×431×760	1045 ×431 ×1375
Indoor unit weight for 760mm depth (kg)	27	28	36	42
Indoor unit weight for 400mm depth (kg)	25	26	36	/
Outdoor unit weight ( kg )	30	34	60	85
Strong drainage components	Standard			
Low-temperature start-up components	Optional			

Notes:

1、The standard working condition is an indoor environment of 35°C, with a wet-bulb temperature of 20°C, and an outdoor environment temperature of 35°C.。

2、The 760mm depth rack air conditioner is suitable for cabinets with a depth of 1000mm to 1400mm; the 400mm depth rack air conditioner is suitable for cabinets with a depth of 600mm to 800mm.。

3、The above table only includes some parameters. The specific configuration should be based on the actual purchased nameplate. For more product information, please contact Quick Thermal Control Technology Co., Ltd.

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