# Micro Data Center Solution

## Foundation of Digital Future

Simplifying and protecting your digital system with this pre-manufactured, self-contained and readily scalable micro data center solution.

Customize with Expert

# Micro Data Center Platform

### AgileRak™
## Indoor Micro Data Center

Fully integrated with indoor type rack, UPS power, battery, cooling, monitoring, security, and fire systems.

Available from half rack to multiple racks. Customization is acceptable.

### AgileHub™
## Outdoor Micro Data Center

Fully integrated with outdoor type cabinet, UPS/DC power, battery, cooling, monitoring, security, and fire systems.

Available with 1 to 3 cabinets all in one solution. Customization is acceptable.

### AgileCub™
## Container Micro Data Center

Fully integrated with ISO container, cabinet, UPS/DC power, battery, cooling, monitoring, security, and fire systems.

Available with 10f, 20f and 40f all in one solution. Customization is acceptable.

Customize with Expert

# AgileRak™ Series

## MDC with Top Package Cooling

3k – 6k MDC fully integrated with closed rack, package cooling, UPS, battery, power distribution, security, monitoring and fire systems.

No complex piping of remote condenser installation.

## MDC with Row Package Cooling

5k – 10k MDC fully integrated with closed rack, package cooling, UPS, battery, power distribution, security, monitoring and fire systems.

No complex piping of remote condenser installation.

## MDC with Rack Split Cooling

3k – 10k MDC fully integrated with closed rack, split cooling, UPS, battery, power distribution, security, monitoring and fire systems.

Modular rack cooling flexible for rack oriented MDC plan, expansion and deployment.

## MDC with Row Split Cooling

6k – 20k MDC fully integrated with closed rack, split cooling, UPS, battery, power distribution, security, monitoring and fire systems.

Row cooling seamless integration with rack row and capacity expansion.

## Key Characteristics

- Rack-level cooling, cold and hot aisle isolation, high efficiency, the PUE values as low as 1.3

- Plug and play design, available online in 10 minutes at the fastest

- Fully enclosed design, dust and noise reduction, protection level up to IP55

- Cabinet covered with insulation material to prevent condensation

- The cabinet is equipped with an emergency pop-up door system as standard, which can automatically open the front and rear doors in the event of a high temperature or fire alarm

- Cabinets, power distribution and cooling units have a variety of forms and specifications for flexible application

- The front and rear doors of the cabinet are equipped with a 3-in-1 access control system

- Standard 10-inch integrated touch monitor screen, the monitoring system does not take up U space of the cabinet

- Support remote web, APP and centralized monitoring, support monitoring protocols such as Modbus-TCP, SNMPV1 / V2, BACnet

- Support global customized services

Customize with Expert

# AgileRak™ Series

## Monitoring System

All in one monitoring host collects, displays and reports system status, locally and remotely.

## Cooling System

1.5kW – 21.2kW precision cooling in rack mount, top mount and row mount type.

## Fire System

Gas extinguishing system triggered by smoke and temperature

## Server Rack

Fully insulated standard 19 inch rack system.

## Security System

3 in 1 access control system(Pin/Fingerprint/RFID) and video monitoring system.

## Power Distribution

Rack mount power distribution, metering, and management for all the power lines.

## UPS System

3– 20kVA rack mount UPS system protect power continuity.

## Battery System

Optional lead-acid batteries and lithium-ion batteries (Rack-mount)

Customize with Expert

# AgileRak™ Series

## Technical Data – AgileRak Rack Type Micro Data Center

| Model | ATM-03N | ATM-03W | ATM-06E | ATM-06T | ATM-06F | ATM-06K | ATM-10S | ATM-10G |
|---|---|---|---|---|---|---|---|---|
| Available Space | 18U | 19U | 26U | 29U | 35U | 35U | 35U | 35U |
| Redundancy | N | N | N | N | N | N | N | N |
| Width -mm | 600/800 | 600 | 600 | 600 | 900 | 900 | 900 | 900 |
| Depth -mm | 1100 | 1100 | 1100 | 1100 | 1400 | 1400 | 1400 | 1400 |
| Height -mm | 1200 | 1590 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 |
| Weight -kg | 162 | 190 | 330 | 374 | 521 | 521 | 525 | 525 |
| IP Level | IP5X | IP5X | IP5X | IP5X | IP5X | IP5X | IP5X | IP5X |
| **Power Section** | | | | | | | | |
| UPS -kVA | 3 | 3 | 6 | 6 | 6 | 6 | 10 | 10 |
| Recommended power for IT -kW | < 2.0 | < 2.4 | < 3.2 | < 3.5 | < 5 | < 5 | < 7 | < 7 |
| UPS Type | Rack | Rack | Rack | Rack | Rack | Rack | Rack | Rack |
| Standard Battery | 12V/9AH 6Pcs | 12V/9AH 6Pcs | 12V/9AH 16Pcs | 12V/9AH 16Pcs | 12V/9AH 16Pcs | 12V/9AH 16Pcs | 12V/9AH 16Pcs | 12V/9AH 16Pcs |
| PDU | Basic 8Slots | Basic 8Slots | Basic 16Slots | Basic 16Slots | Basic 16Slots | Basic 16Slots | Basic 16Slots | Basic 16Slots |
| Recommended Breaker | 16A | 32A | 63A | 63A | 63A | 63A | 80A | 80A |
| **Cooling Section** | | | | | | | | |
| Cooling Type | Fan Ventilation | Packaged DX | Packaged DX | Split DX | Split DX | Package DX | Split DX | Package DX |
| Mount Type | Top | Top | Top | Rack | Row | Row | Row | Row |
| Capacity-kW | 2.0 | 3.5 | 3.5 | 3.9 | 5.6 | 5.6 | 7.6 | 7.6 |
| Emergency Ventilation | √ | √ | √ | √ | √ | √ | √ | √ |
| **Monitoring Section** | | | | | | | | |
| Monitoring Function | Touch Screen, Remote Web Access | Touch Screen, Remote Web Access | Touch Screen, Remote Web Access | Touch Screen, Remote Web Access | Touch Screen, Remote Web Access | Touch Screen, Remote Web Access | Touch Screen, Remote Web Access | Touch Screen, Remote Web Access |
| | Temp. & Hum. | Temp. & Hum. | Temp. & Hum. | Temp. & Hum. | Temp. & Hum. | Temp. & Hum. | Temp. & Hum. | Temp. & Hum. |
| | UPS Mgmt. | UPS Mgmt. | UPS Mgmt. | UPS Mgmt. | UPS Mgmt. | UPS Mgmt. | UPS Mgmt. | UPS Mgmt. |
| | - | Cooling Mgmt. | Cooling Mgmt. | Cooling Mgmt. | Cooling Mgmt. | Cooling Mgmt. | Cooling Mgmt. | Cooling Mgmt. |
| | Fire Detection | Fire Detection | Fire Detection | Fire Detection | Fire Detection | Fire Detection | Fire Detection | Fire Detection |
| | - | Water Leaking | Water Leaking | Water Leaking | Water Leaking | Water Leaking | Water Leaking | Water Leaking |
| | Door Status | Door Status | Door Status | Door Status | Door Status | Door Status | Door Status | Door Status |

Customize with Expert

# AgileRow™ Series

## Closed Aisle System

Independent cold / hot closed aisle are integrated at the front and rear of the cabinet, respectively.

## Monitoring System

All in one monitoring host collects, displays and reports system status, locally and remotely.

## Security System

3 in 1 access control system(Pin/Fingerprint/RFID) and video monitoring system.

## Power Distribution

Rack mount power distribution, metering, and management for all the power lines.

## Power System

48VDC power, or 3kVA – 200kVA rack mount or modular UPS system protect power continuity.

## Cooling System

2.5kW – 90kW rack / row mount precision cooling, seamlessly matched to the rack.

## Server Rack

Standard 19-inch server cabinet, glass front door, sheet metal back door

Customize with Expert

# AgileRow™ Series

## Technical Data - AgileRow Type Micro Data Center

| Model | Customization |
|---|---|
| Maximum Rack No. -pcs | 20 / Row |
| Power Density -kW/Rack | <20 |
| Rack Depth -mm | 1400 or customize |
| Rack Width -mm | 600 / 800 |
| Rack Height -mm | 2000 / 2200 / 2500 |
| Closed Aisle | Hot and cold aisles are fully closed or semi-closed |
| **Power Section** | |
| UPS -kVA | Up to 200kVA / unit |
| Battery | Per Situation, VRLA / Lithium-ion Battery |
| PDU | Basic / Smart |
| **Cooling System** | |
| DX Cooling -kW | Up to 90kW / unit |
| Cooling Type | DX / CW |
| Mount Type | Top / Row / Rack |
| **Fire System** | |
| Fire detection Sensor | Smoke / Temp / Early Detection |
| Fire Extinguishing Gas | FM200 |
| Mount Type | Rack |
| **Monitoring Section** | |
| | Touch Screen, Remote Web Access |
| | Temp. & Hum. |
| | Power Mgmt. |
| Monitoring Function | Cooling Mgmt. |
| | Fire Detection |
| | Water Leaking |
| | Video Monitoring |
| | Access control |

# AgileCub™ Series

Attom container type Micro Data Center designed and engineered with standard container size of all in one design helps IT professionals deploy data center quickly and easily.

## Fire System

Fire extinguisher and early detection system.

## Cooling System

2.5kW – 40kW precision cooling in rack mount, top mount and row mount type.

## Monitoring System

All in one monitoring host collects, displays and reports system status, locally and remotely.

## Power Distribution

Rack mount power distribution, metering, and management for all the power lines.

## UPS System

3kVA – 200kVA rack mount modular UPS system protect power continuity.

## Security System

3 in 1 access control system(Pin/Fingerprint /RFID) and video monitoring system.

## Battery System

Optional lead-acid batteries and lithium-ion batteries (Rack-mount)

## Rack System

Standard 19-inch server cabinet, 75% front and rear mesh door through-hole ratio, static load up to 1800kg, various options available
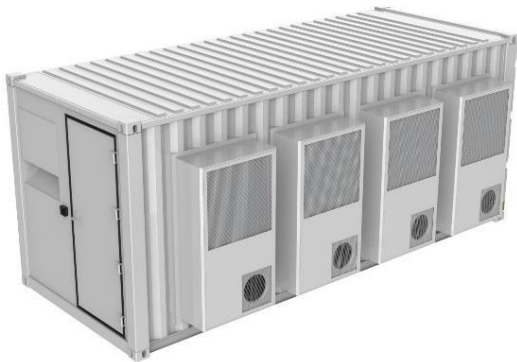
Customize with Expert

# AgileCub™ Series

## 10F Container Data Center

All in one 10F Container MDC fully integrated with standard rack, wall mount cooling, AC/DC power, battery, power distribution, security, monitoring and fire systems.

IP55 protection and thermal insulated for outdoor deployment.

## 20F Container Data Center

All in one 20F Container MDC fully integrated with standard rack, wall mount cooling, AC/DC power, battery, power distribution, security, monitoring and fire systems.
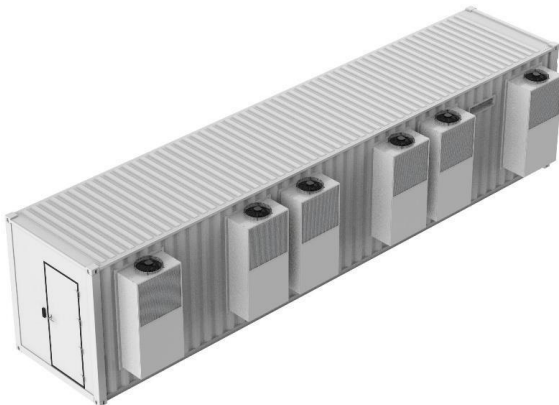
IP55 protection and thermal insulated for outdoor deployment.

## 40F Container Data Center

All in one 40F Container MDC fully integrated with standard rack, wall mount cooling, AC/DC power, battery, power distribution, security, monitoring and fire systems.
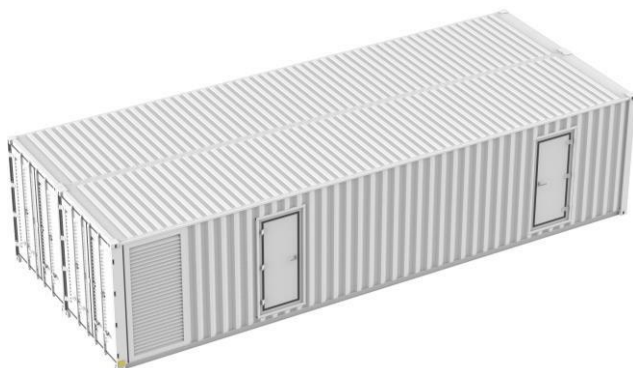
IP55 protection and thermal insulated for global deployment.

## Dual Container Data Center

Assembled from 2 or more containers, integrated with standard rack, row mount cooling, AC/DC power, battery, power distribution, security, monitoring and fire systems.

IP55 protection and thermal insulated for global deployment.
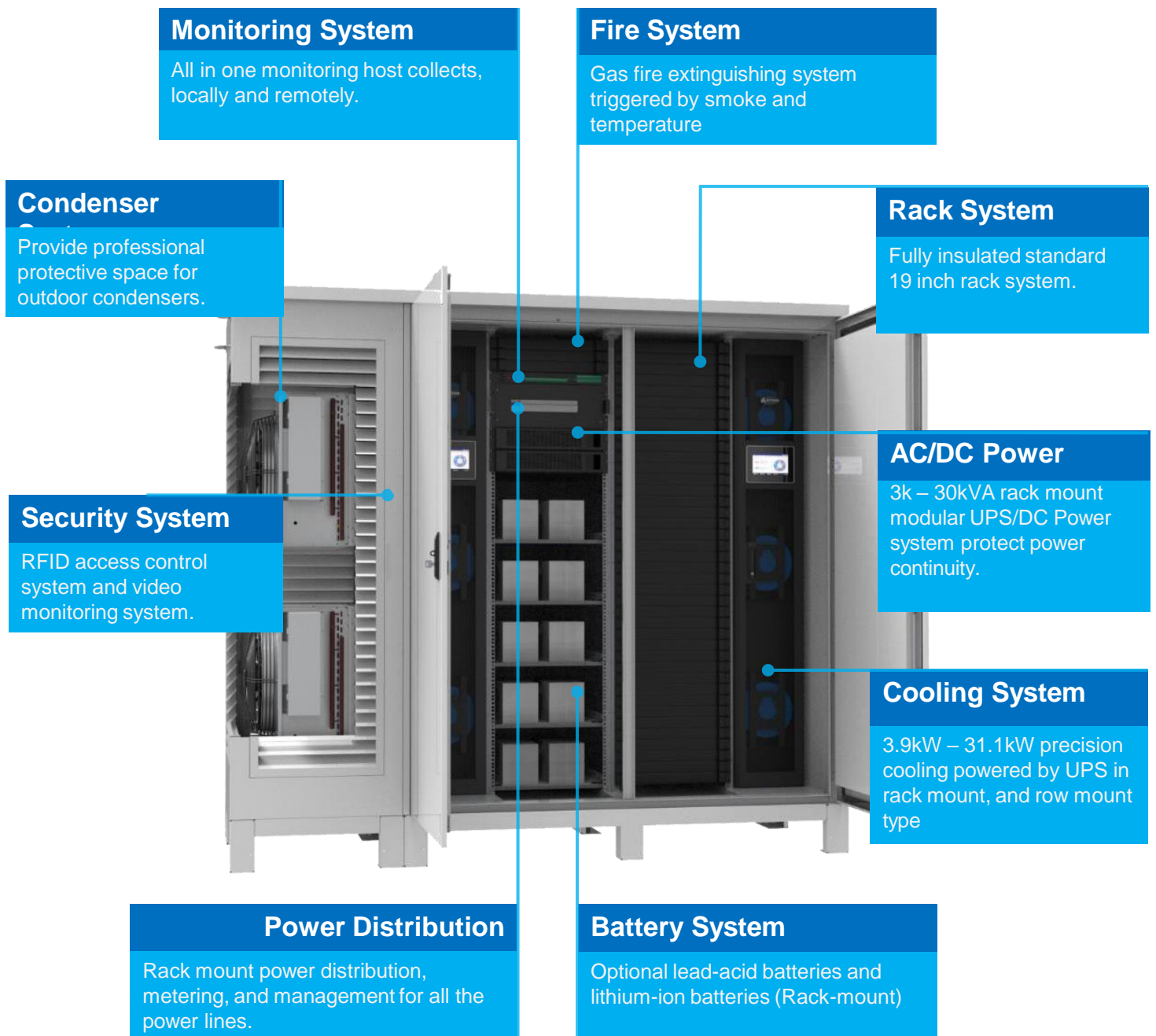
Customize with Expert

# AgileCub™ Series

## Technical Data – AgileCub Containerized Micro Data Center

| Model | ATM-10-C03 | ATM-20-C03 | ATM-30-C08 | ATM-60-C08 | ATM-80-C18 | ATM-140-C18 | ATM-160-C36 | ATM-320-C36 | Customization |
|---|---|---|---|---|---|---|---|---|---|
| IT Rack No. | 2 | 2 | 6 | 6 | 16 | 14 | 32 | 30 | Per Definition |
| Power Density - kW/Rack | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | <20 |
| Container Width -mm | 2438 | 2438 | 2438 | 2438 | 2438 | 2438 | 4876 | 4876 | Per Definition |
| Container Length -mm | 2991 | 2991 | 6058 | 6058 | 12192 | 12192 | 12192 | 12192 | Per Definition |
| Container Height -mm | 2896 | 2896 | 2896 | 2896 | 2896 | 2896 | 2896 | 2896 | Per Definition |
| **Power System** | | | | | | | | | |
| Power Redundancy | N+1 | N+1 | N+1 | N+1 | N+1 | N+1 | N+1 | N+1 | N+1 / 2N |
| UPS Capacity -kVA | 2* 10 | 3* 10 | 3* 15 | 5* 15 | 5* 25 | 7* 25 | 8* 25 | 7* 50 | Max. 500kVA |
| UPS Type | Rack | Rack | Sub-Modular | Sub-Modular | Sub-Modular | Sub-Modular | Sub-Modular | Floor-Modular | Configure on demand |
| Battery | 15min@10kW | 15min@20kW | 15min@30kW | 15min@60kW | 15min@80kW | 15min@140kW | 15min@160kW | 15min@300kW | Configure on demand |
| PDU | Smart Type | Smart Type | Smart Type | Smart Type | Smart Type | Smart Type | Smart Type | Smart Type | Per Situation |
| **Cooling System** | | | | | | | | | |
| Cooling Redundancy | N+1 | N+1 | N+1 | N+1 | N+1 | N+1 | N+1 | N+1 | N+1 / 2N |
| Capacity -kW | 2* 12.5 | 2* 21.2 | 3* 17.5 | 4* 21.2 | 5* 21.2 | 8* 21.2 | 10* 21.2 | 18* 21.2 | Row /Room /Wall |
| Mount Type | Wall | Wall | Wall | Wall | Wall | Wall | Wall | Wall | Row /Room /Wall |
| **Fire Extinguishing System** | | | | | | | | | |
| Fire Warning System | VESDA /Smoke/Temp | VESDA /Smoke/Temp | VESDA /Smoke/Temp | VESDA /Smoke/Temp | VESDA /Smoke/Temp | VESDA /Smoke/Temp | VESDA /Smoke/Temp | VESDA /Smoke/Temp | VESDA /Smoke /Temp |
| Fire Extinguishing Gas | FM200 / Novec1230 | FM200 / Novec1230 | FM200 / Novec1230 | FM200 / Novec1230 | FM200 / Novec1230 | FM200 / Novec1230 | FM200 / Novec1230 | FM200 / Novec1230 | FM200 / Novec1230 |
| **DCIM System** | | | | | | | | | |
| Monitoring Function | Touch Screen | Touch Screen | Touch Screen | Touch Screen | Touch Screen | Touch Screen | Touch Screen | Touch Screen | Touch Screen |
| | Temp. & Hum. | Temp. & Hum. | Temp. & Hum. | Temp. & Hum. | Temp. & Hum. | Temp. & Hum. | Temp. & Hum. | Temp. & Hum. | Temp. & Hum. |
| | Power Mgmt. | Power Mgmt. | Power Mgmt. | Power Mgmt. | Power Mgmt. | Power Mgmt. | Power Mgmt. | Power Mgmt. | Power Mgmt. |
| | Cooling Mgmt. | Cooling Mgmt. | Cooling Mgmt. | Cooling Mgmt. | Cooling Mgmt. | Cooling Mgmt. | Cooling Mgmt. | Cooling Mgmt. | Cooling Mgmt. |
| | Fire Detection | Fire Detection | Fire Detection | Fire Detection | Fire Detection | Fire Detection | Fire Detection | Fire Detection | Fire Detection |
| | Water Leaking | Water Leaking | Water Leaking | Water Leaking | Water Leaking | Water Leaking | Water Leaking | Water Leaking | Water Leaking |
| | Video Monitoring | Video Monitoring | Video Monitoring | Video Monitoring | Video Monitoring | Video Monitoring | Video Monitoring | Video Monitoring | Video Monitoring |

## Customize with Expert

# AgileHub™ Series

AgileHub Micro Data Center developed with multiple configurations that fit into diverse application scenario, all with prefabricated size supports predicted management and quick deployment.

## Monitoring System
All in one monitoring host collects, locally and remotely.

## Fire System
Gas fire extinguishing system triggered by smoke and temperature

## Condenser
Provide professional protective space for outdoor condensers.

## Rack System
Fully insulated standard 19 inch rack system.

## Security System
RFID access control system and video monitoring system.

## AC/DC Power
3k – 30kVA rack mount modular UPS/DC Power system protect power continuity.

## Cooling System
3.9kW – 31.1kW precision cooling powered by UPS in rack mount, and row mount type

## Power Distribution
Rack mount power distribution, metering, and management for all the power lines.

## Battery System
Optional lead-acid batteries and lithium-ion batteries (Rack-mount)

Customize with Expert

# AgileHub™ Series

## 1-Rack MDC with Rack Cooling

MDC fully integrated with 1 rack space, rack cooling, AC/DC power, battery, power distribution, security, monitoring and fire systems.

IP55 protection and thermal insulated for outdoor deployment.

## 2-Rack MDC with Rack Cooling

MDC fully integrated with 2 rack space, rack cooling, AC/DC power, battery, power distribution, security, monitoring and fire systems.

IP55 protection and thermal insulated for outdoor deployment.

## 2-Rack MDC with Row Cooling

MDC fully integrated with 2 rack space, inrow cooling, AC/DC power, battery, power distribution, security, monitoring and fire systems.

IP55 protection and thermal insulated for outdoor deployment.

## 3-Rack MDC with Rack Cooling

MDC fully integrated with 3 rack space, rack cooling, AC/DC power, battery, power distribution, security, monitoring and fire systems.

IP55 protection and thermal insulated for outdoor deployment.

Customize with Expert

# AgileHub™ Series

## Technical Data – AgileHub Outdoor Micro Data Center

| Model | ATM-03-H01W | ATM-06-H01K | ATM-10-H02K | ATM-10-H02R | ATM-20-H03K | Customization |
|---|---|---|---|---|---|---|
| Available IT Space | 33U | 27U | 67U | 73U | 101U | Max 3 Rack |
| Redundancy | N | N | N | N | N | N /N+1 /2N |
| Width -mm | 905 | 1400 | 2000 | 2600 | 2600 | Per Situation |
| Depth -mm | 1080 | 1600 | 1600 | 1600 | 1600 | Per Situation |
| Height -mm | 2105 | 2300 | 2300 | 2300 | 2300 | 2600 Max. |
| Cabinet Weight -kg | 160 | 560 | 900 | 1160 | 1242 | Per Situation |
| IP Level | IP55 | IP55 | IP55 | IP55 | IP55 | Per Situation |
| **Power Section** | | | | | | |
| UPS -kVA | Optional | 6 | 10 | 10 | 20 | Per Situation |
| Recommended IT Power -kW | 1.5 | ≤3 | ≤5 | ≤5 | ≤10 | Per Situation |
| UPS Type | Rack | Rack | Rack | Rack | Rack | Rack |
| Battery | Rack-mount Lithium (1* 48V50Ah) | Rack-mount VRLA (2* 16Pcs12V9Ah) | Rack-mount VRLA (2* 16Pcs12V9Ah) | Rack-mount VRLA (2* 16Pcs12V9Ah) | Rack-mount VRLA (32Pcs12V9Ah) | 7-200Ah |
| Backup Time - min | 60 | 20 | 13 | 13 | 5 | Per Situation |
| PDU | BLVD: 8* 1P(MCB) | Basic 16Slots | Basic 16Slots | Basic 16Slots | Basic 16Slots | Basic/Smart |
| 48VDC Power | 2* 30A Modules | Optional | Optional | Optional | Optional | Per Situation |
| **Cooling Section** | | | | | | |
| Cooling Type | Package DX | Split DX | Split DX | Split DX | Split DX | Packaged/Split |
| Mount Type | Door | Rack | Rack | Row | Rack | Door/Rack/Row |
| Capacity-kW | 1.5 | 3.9 | 5 | 5.6 | 12 | 31 Max. |
| **DCIM Section** | | | | | | |
| Monitoring Function | Remote Web | Remote Web | Remote Web | Remote Web | Remote Web | Remote Web |
| | Temp.&Hum. | Temp.&Hum. | Temp.&Hum. | Temp.&Hum. | Temp.&Hum. | Temp.&Hum. |
| | UPS Mgmt. | UPS Mgmt. | UPS Mgmt. | UPS Mgmt. | UPS Mgmt. | UPS Mgmt. |
| | Cooling Mgmt. | Cooling Mgmt. | Cooling Mgmt. | Cooling Mgmt. | Cooling Mgmt. | Cooling Mgmt. |
| | Smoke Sensor | Smoke Sensor | Smoke Sensor | Smoke Sensor | Smoke Sensor | Smoke Sensor |
| | Leaking Sensor | Leaking Sensor | Leaking Sensor | Leaking Sensor | Leaking Sensor | Leaking Sensor |
| | Door Status | Door Status | Door Status | Door Status | Door Status | Door Status |

Customize with Expert

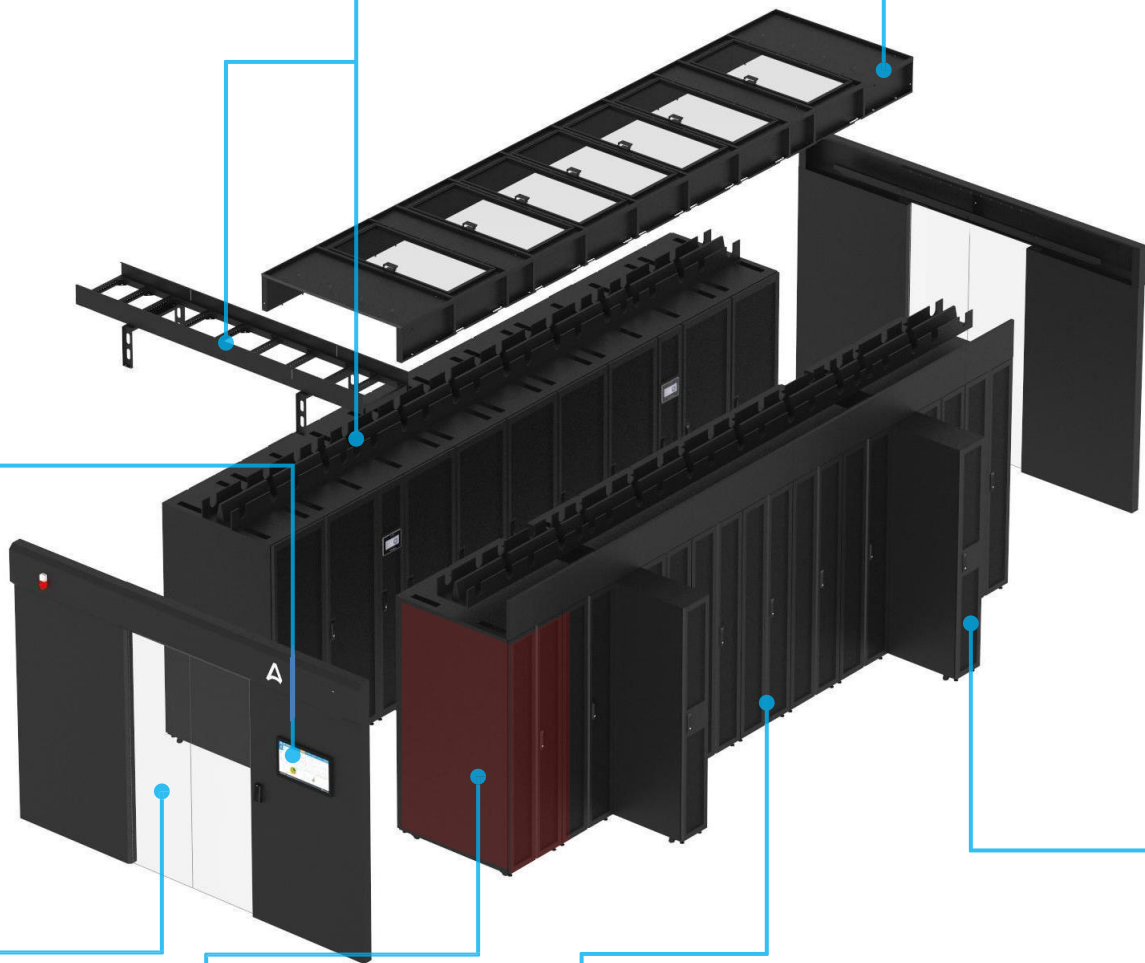# AgileMod™ Series

## Monitoring System

Module-level monitoring system + local touch screen, supporting 3D, temperature cloud map and asset management, etc

## Cabling System

Row-level cable ladder supports wiring between two columns of racks, and M-type cabling on the top of the rack supports isolated wiring

## Closed Aisle System

It consists of horizontally expanding modular skylights, supports and doors, which can be opened automatically.

## Access Door

All-glass door design electric sliding door assembly, support fingerprint + password + RFID access control

## Power System

Integrated design of modular UPS and power distribution cabinet, Independent configuration is optional

## Server Rack

Standard 19-inch server cabinet, 75% front and rear mesh door through-hole ratio, static load up to 1800kg

## Cooling System

Row-mount Cooling system with DX or CW, the same appearance style as the server rack
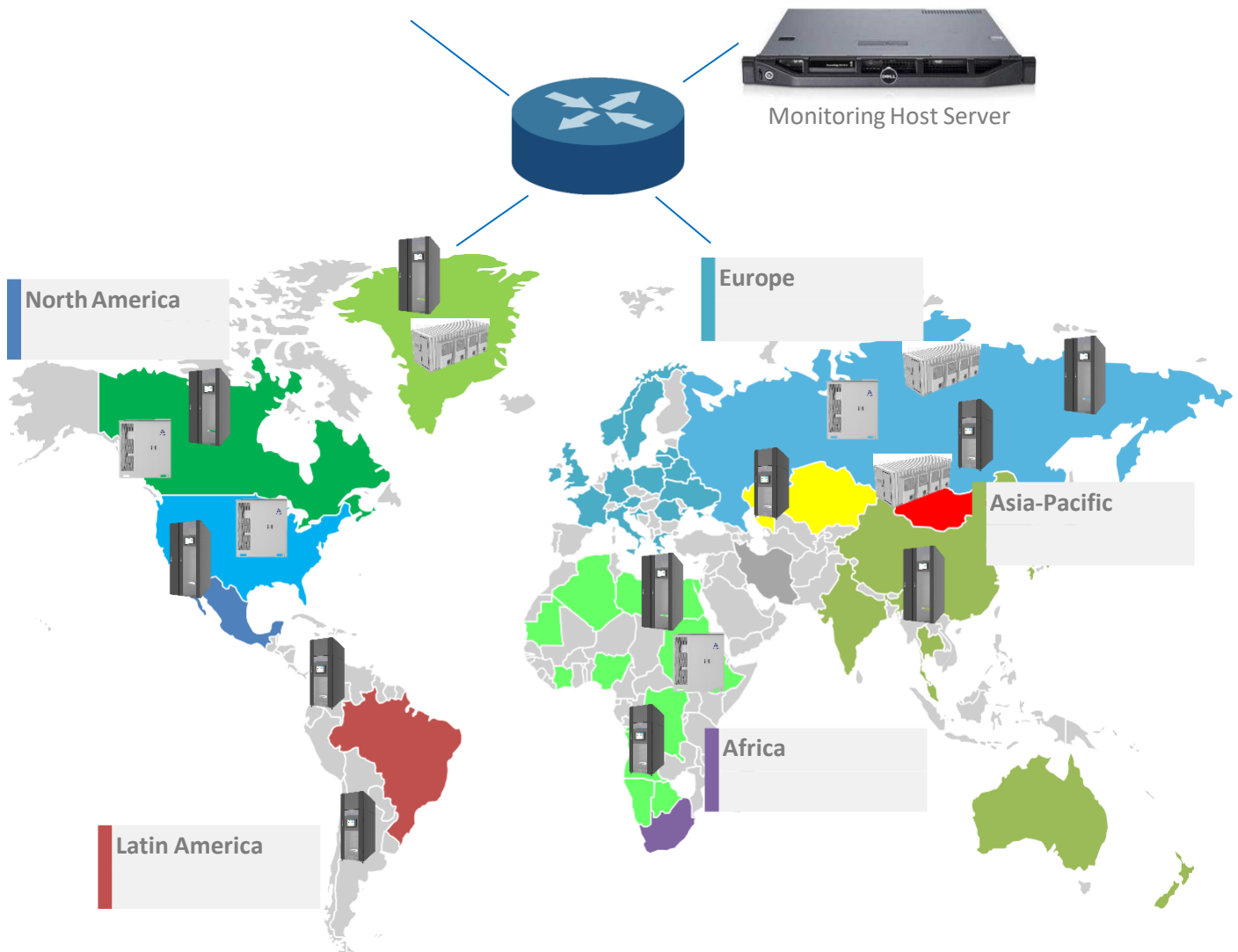
Customize with Expert

# AgileMod™ Series

## Technical Data – AgileMod Containment Type Micro Data Center

| Model | Customized | |
|---|---|---|
| Maximum Rack No. -pcs | 48 / Module | |
| Power Density -kW/Rack | <20 | |
| Rack Depth -mm | 1000 / 1100 / 1200 | |
| Rack Width -mm | 600 / 800 | |
| Rack Height -mm | 2000 / 2200 / 2500 | |
| Closed Aisle | Hot aisle closed / Cold aisle closed | |
| **Power Section** | | |
| UPS -kVA | Up to 500kVA / Unit | |
| Battery | Per Situation, VRLA / Lithium-ion Battery | |
| PDU | Basic / Smart | |
| **Cooling System** | | |
| Cooling -kW | Up to 200kW / Unit | |
| Cooling Type | DX / CW | |
| Mount Type | Row, Room | |
| **Fire System** | | |
| Fire type | No independent configuration, room-level fire system is recommended | |
| Fire linkage | Automatically opens closed aisles and doors | |
| **Monitoring Section** | | |
| Monitoring Function | Touch Screen, Remote Web Access | |
| | Temp. & Hum. | |
| | Power Mgmt. | |
| | Cooling Mgmt. | |
| | Fire Detection | |
| | Water Leaking | |
| | Video Monitoring | |
| | Access Control | |

Customize with Expert

# Centralized Monitoring System

Centralized Monitoring system collects all the distributed Edge Micro Data Centers into a single console, to easily control, alert, and manage the remote sites, and simplify the multiple data center operation.



Monitoring Host Server

**North America**

**Europe**

**Asia-Pacific**

**Africa**

**Latin America**

Customize with Expert

## We Expertise Micro Data Centers

### Expertise

Products designed with heart featuring reliable quality and balanced performance to protect your business revenue.

### Speed

A professional team always standby with service spirit and quick response to support your business agility.

### Flexibility

Fully customizable as per your requirements to build your own product solution and boost your own business.

## Certifications

Customize with Expert

# Our Customer Success

We always think in customer perspective to support our customers success. We build our long term success with the values of customer first.



Customize with Expert

# Precision Cooling System

## Foundation of Digital Future

The professional cooling solutions for you to build highly Reliable, Efficient and Green Data Center.

Customize with Expert

# Why Choose Us

We are experts in data center thermal management system.

## Quality

Products designed with heart featuring reliable quality and balanced cost to improve your business margin and performance.

## Speed

A professional team always standby with service spirit and quick response to support your business agility.

## Flexibility

Fully customizable as per your requirements to build your own product solution and boost your own business.
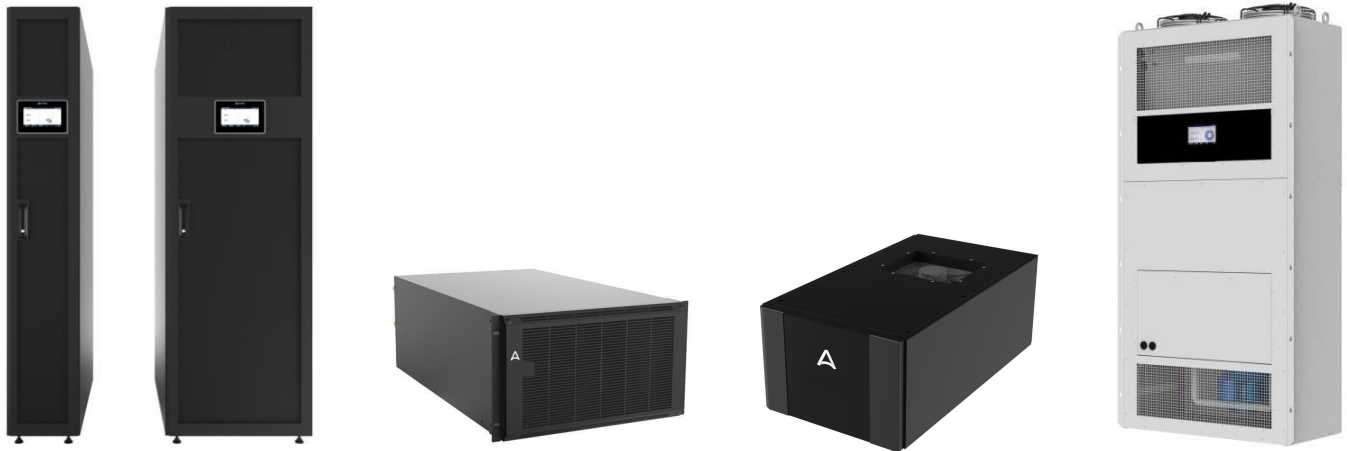
## Certifications

# Precision cooling Platform

## SmoothAir™
## Modular Precision Cooling

Cooling Range: 2.5kW-90kW

Specially designed and optimized for Modular Data Centers.



## WiseAir™
## Room Precision Cooling

Cooling range: 5.6kW-200kW

Highly reliable computer room air conditioner solutions.
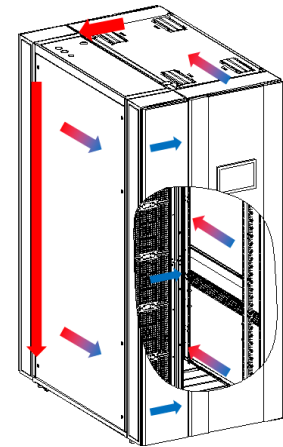
# SmoothAir™ – Row Mount DX

Air cooled, row mount, split type, ideal for micro data center, integrated modular data center solutions.

## 5.6kW –90.1kW

## 300 /600 /900mm Width

**1** Dynamically modulated cooling capacity with inverter compressor maintains temperature within envelop and prevent compressor from cycling during low heat load period.

**2** Air flow modulates with EC fans to match IT equipment requirements. Each fan module is easy to change with quick couple connections.

**3** Precision cooling controller monitors and protects unit constantly. Easy to be integrated into BMS to display, control and manage the system.

**4** R410A green refrigerant is highly efficient and no ODP.

**5** Copper piping adopts quick connections and supports bottom and top connections.

**6** Easy to change G4 air filter and sealed doors help to build a clean and quiet MDC.

**7** Slide drawer style electric box makes service easier.

**8** Optional with condensate pump, leaking kit and long piping kit for diverse applications.

# SmoothAir™ – Row Mount DX

## Technical Data

| Indoor Unit | S-005RA | S-007RA | S-012RA | S-017RA | S-020RA | S-025RA | S-030RA | S-040RA | S-050RA | S-065RA | S-075RA | S-090RA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Cooling-kW | 5.6 | 7.6 | 12.8 | 17.6 | 21.2 | 25.1 | 31.1 | 40.9 | 51.2 | 65.7 | 76.8 | 90.1 |
| SHR-% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Air Volume-m3/h | 2000 | 2250 | 2400 | 4500 | 4920 | 5000 | 5800 | 8000 | 10000 | 12000 | 13500 | 16000 |
| Mount Type | Row | Row | Row | Row | Row | Row | Row | Row | Row | Row | Row | Row |
| Cooling Type | DX | DX | DX | DX | DX | DX | DX | DX | DX | DX | DX | DX |
| Height-mm | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 |
| Depth-mm | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 |
| Width-mm | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 600 | 600 | 600 | 900 | 900 |
| Weight-kg | 210 | 213 | 233 | 253 | 258 | 260 | 320 | 360 | 420 | 460 | 540 | 620 |
| Reheat-kW | 3.0 | 3.0 | 3.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Hum.(optional)-kg/h | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 3 | 3 | 3 | 3 | 3 | 3 |
| Power Input[1] | 208-240V /50-60Hz /1Ph-2Ph | 208-240V /50-60Hz /1Ph-2Ph | 208-240V /50-60Hz /1Ph-2Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph |
| FLA-A[1] with heating | 28.2 | 37.3 | 48.7 | 27.0 | 26.7 | 27.9 | 34.6 | 37.7 | 48.1 | 60.6 | 70.8 | 84.6 |
| FLA-A[1] with hum. | 33.3 | 42.4 | 53.8 | 32.1 | 31.8 | 33.0 | 39.7 | 47.9 | 58.3 | 70.8 | 81.0 | 94.8 |
| Power Input[2] | - | - | - | 208V /50-60Hz /3Ph | 208V /50-60Hz /3Ph | 208V /50-60Hz /3Ph | 208V /50-60Hz /3Ph | 208V /50-60Hz /3Ph | - | - | - | - |
| FLA-A[2] with heating | - | - | - | 49.4 | 48.8 | 51.1 | 63.2 | 68.9 | - | - | - | - |
| FLA-A[2] with hum. | - | - | - | 52.5 | 52.0 | 54.2 | 66.4 | 75.1 | - | - | - | - |
| Power Input[3] | - | - | - | 460V /60Hz /3Ph | 460V /60Hz /3Ph | 460V /60Hz /3Ph | 460V /60Hz /3Ph | 460V /60Hz /3Ph | 460V /60Hz /3Ph | 460V /60Hz /3Ph | 460V /60Hz /3Ph | 460V /60Hz /3Ph |
| FLA-A[3] with heating | - | - | - | 22.3 | 22.1 | 23.1 | 28.6 | 31.1 | 39.7 | 50.1 | 58.5 | 69.9 |
| FLA-A[3] with hum. | - | - | - | 26.5 | 26.3 | 27.3 | 32.8 | 39.6 | 48.2 | 58.6 | 66.9 | 78.4 |
| Standard Outdoor | | | | | | | | | | | | |
| Unit Model | KSF08AN | KSF12AN | KSF18AN | KSF24AN | KSF32AN | KSF38AN | KSF42AN | KSF52AN | KSF62AN | KSF85AN | KSF52AN | KSF62AN |
| Unit Qty | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 |

**Notes:**
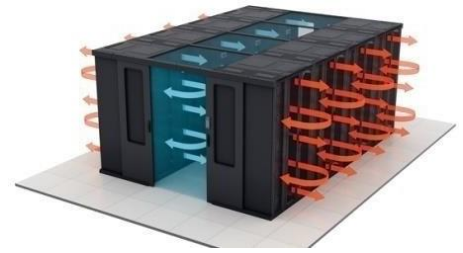1. Air flow is based upon standard fan speed setting. Fan modulates per real loads.
2. Cooling Capacity based on 37℃/24%RH return air and 45℃ condensing temperature.
3. FLA of indoor unit includes FLA of outdoor unit, and outdoor unit power connected from indoor unit.
4. SNMP monitoring port, dual power input, and leaking detection are optional.
5. Standard unit works -15℃ above outdoor temperature, select low temperature kit to run for -35C outdoor ambient temperature.

# SmoothAir™ – Row Mount CW

Chilled water, row mount, ideal for modular data center and container data center solutions.

## 28.9kW – 65.8kW

## 300mm/ 600mm Width



**1** Dynamically modulated cooling capacity with motorized ball valve maintains temperature within envelop and prevent water from cycling during low heat load period.

**2** Air flow modulates with EC fans to match IT equipment requirements. Each fan module is easy to change with quick couple connections.

**3** Precision cooling controller monitors and protects unit constantly. Easy to be integrated into BMS to display, control and manage the system.

**4** Touch type color display panel to easily view and control the units.

**5** Copper piping supports bottom and top connections.

**6** Easy to change G4 air filter and sealed doors help to build a clean and quiet MDC.

**7** Slide drawer style electric box makes service easier.

**8** Optional with condensate pump, leaking kit and dual power supply for diverse applications.

# SmoothAir™ – Row Mount CW

## Technical Data

| Unit | S-025RC | | | S-045RC | | | S-065RC | | |
|---|---|---|---|---|---|---|---|---|---|
| Water Temperature inlet/outlet - ℃ | 7/12 | 10/15 | 13/18 | 7/12 | 10/15 | 13/18 | 7/12 | 10/15 | 13/18 |
| Total Capacity –kW (40℃ Return Air) | 41.0 | 36.8 | 32.9 | 65.4 | 59.0 | 52.4 | 93.2 | 84.0 | 74.8 |
| Total Capacity –kW (37℃ Return Air) | 38.8 | 33.0 | 28.9 | 59.8 | 52.4 | 46.0 | 87.0 | 75.0 | 65.8 |
| Total Capacity –kW (35℃ Return Air) | 37.1 | 30.7 | 26.3 | 56.6 | 48.2 | 41.6 | 83.0 | 69.0 | 59.6 |
| Total Capacity –kW (32℃ Return Air) | 33.8 | 27.0 | 22.2 | 51.2 | 41.4 | 34.8 | 75.2 | 60.4 | 50.4 |
| Total Capacity –kW (30℃ Return Air) | 31.1 | 24.3 | 19.5 | 47.0 | 37.0 | 30.4 | 69.6 | 54.4 | 44.2 |
| SHR -% | 100 | | | 100 | | | 100 | | |
| Air Volume -m3/h | 4800 | | | 9000 | | | 11400 | | |
| Mount Type | Row | | | Row | | | Row | | |
| Height –mm | 2000(42U) | | | 2000(42U) | | | 2000(42U) | | |
| Depth –mm | 1100 | | | 1100 | | | 1100 | | |
| Width –mm | 300 | | | 600 | | | 600 | | |
| Weight –kg | 190 | | | 330 | | | 400 | | |
| Reheat-kW | 3.0 | | | 3.0 | | | 3.0 | | |
| Hum.(optional) -kg/h | 1.5 | | | 1.5 | | | 1.5 | | |
| Power Input[1] | 208-240V/50-60Hz/1Ph-2Ph | | | 380-415V/50-60Hz/3Ph | | | 380-415V/50-60Hz/3Ph | | |
| FLA –A[1] with heating | 22.7 | | | 13.7 | | | 16.0 | | |
| FLA –A[1] with hum. | 27.8 | | | 18.8 | | | 26.1 | | |
| Power Input[2] | - | | | 208V/50-60Hz/3Ph | | | 208V/50-60Hz/3Ph | | |
| FLA –A[2] with heating | - | | | 25.1 | | | 29.2 | | |
| FLA –A[2] with hum. | - | | | 28.1 | | | 35.5 | | |
| Power Input[3] | - | | | 460V/50-60Hz/3Ph | | | 460V/50-60Hz/3Ph | | |
| FLA –A[3] with heating | - | | | 11.3 | | | 13.2 | | |
| FLA –A[3] with hum. | - | | | 15.5 | | | 21.5 | | |

**Notes:**
1. Air flow is based upon standard fan speed setting. Fan modulates per real loads.
2. SNMP monitoring port, dual power input, 3-way valve and leaking detection are optional.

# SmoothAir™ – Row Mount DX Package Type

Air cooled, row mount package self contained type, ideal for data center without space for outdoor condenser

## 5.6kW –10.8kW

## 300mm Width

**1** Dynamically modulated cooling capacity with inverter compressor maintains temperature within envelop and prevent compressor from cycling during low heat load period.

**2** Air flow modulates with EC fans to match IT equipment requirements. Each fan module is easy to change with quick couple connections.

**3** Precision cooling controller monitors and protects unit constantly. Easy to be integrated into BMS to display, control and manage the system.

**4** R410A green refrigerant is highly efficient and no ODP.

**5** Built in condenser with EC fan speed adjustable to meet tight space application. Optional with duct hose to be connecting to air vent.

**6** Easy to change G4 air filter and sealed doors help to build a clean and quiet MDC.

**7** Easy to touch electric box makes service convenient.

**8** Optional with SNMP communication, condensate pump, water leaking kit.
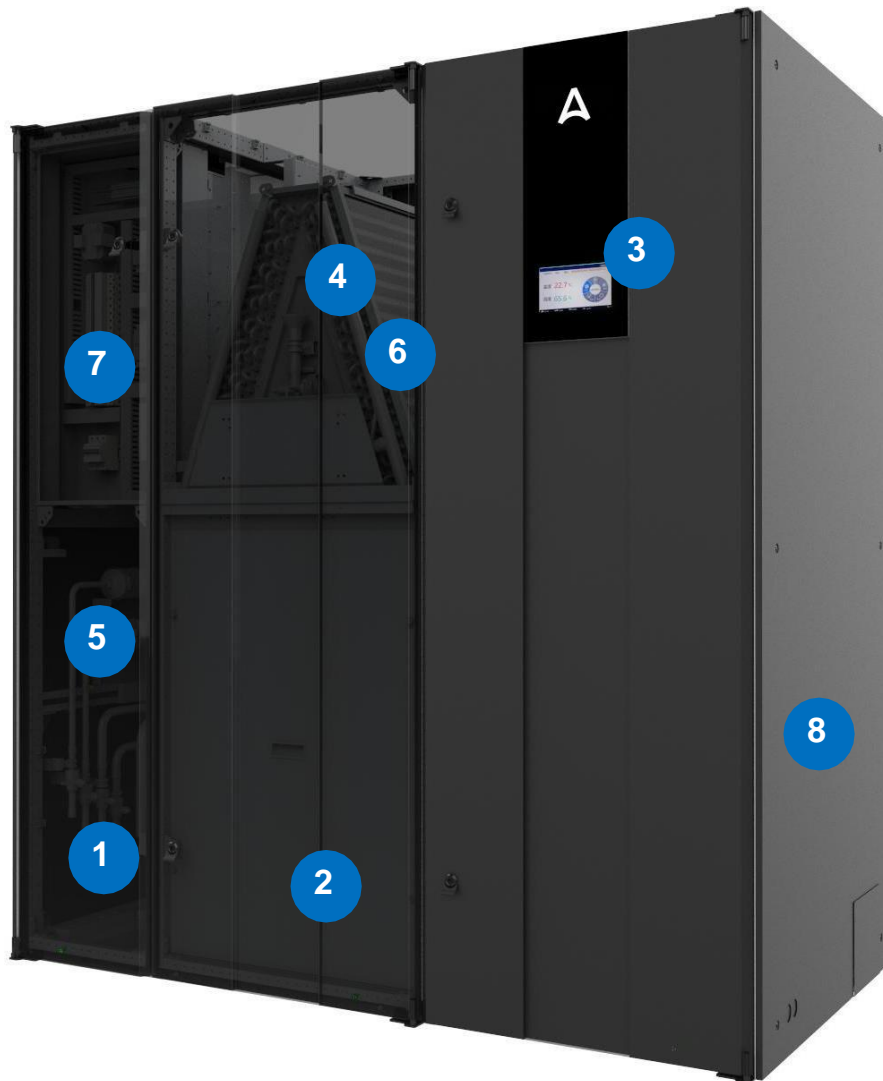
# SmoothAir™ – Row Mount Package DX Type

## Technical Data

| Indoor Unit | S-005PA | S-007PA | S-010PA |
|---|---|---|---|
| Total Cooling-kW | 5.6 | 7.6 | 10.8 |
| SHR-% | 100 | 100 | 100 |
| Air Volume-m3/h | 2000 | 2250 | 2500 |
| Mount Type | Row | Row | Row |
| Cooling Type | DX Self-Contained | DX Self-Contained | DX Self-Contained |
| Height-mm | 2000(42U) | 2000(42U) | 2000(42U) |
| Depth-mm | 1100 | 1100 | 1100 |
| Width-mm | 300 | 300 | 300 |
| Weight-kg | 210 | 213 | 233 |
| Reheat-kW | 3.0 | 3.0 | 3.0 |
| Hum.(optional)-kg/h | 1.5 | 1.5 | 1.5 |
| Power Input[1] | 208-240V/50-60Hz/1Ph-2Ph | 208-240V/50-60Hz/1Ph-2Ph | 208-240V/50-60Hz/1Ph-2Ph |
| FLA - A | 28.2 | 37.3 | 48.7 |
| FLA - A[1]with hum. | 33.3 | 42.4 | 53.8 |

**Notes:**
1, Air flow is based upon unit speed setting. Fan modulates per real loads.
2, Cooling Capacity  based on 37℃/24%RH return air and 35℃ outdoor temperature.
3, SNMP monitoring port, dual power input, condenser air duct and leaking detection are optional.
4, Standard unit works -15℃ above outdoor temperature, select low temperature kit to run for -35C outdoor ambient temperature.
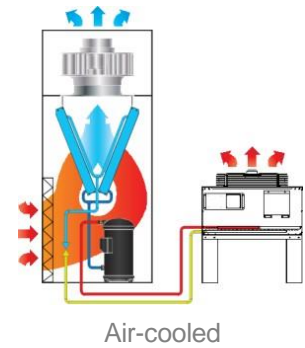
# WiseAir™ – Product Configuration



| | | | |
|---|---|---|---|
| **1** | Highly reliable scroll compressor | **5** | Industry-leading brands thermostatic expansion valve/electronic expansion valve |
| **2** | Industry leading brands EC / AC fan | **6** | A large area air filtration system closed to heat exchanger |
| **3** | Intelligent industry-leading controller with color touch screen. Supports BMS integration, teamwork and master/slave working policy. | **7** | Electrode humidifier |
| **4** | A large area of high-efficiency heat exchanger | **8** | Modular design of cabinet can easily achieve secondary disassembly |

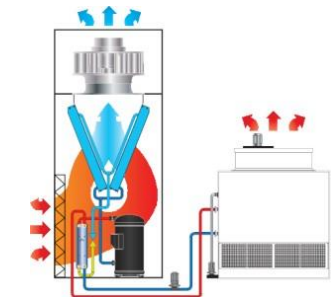# WiseAir™ – Product Configuration
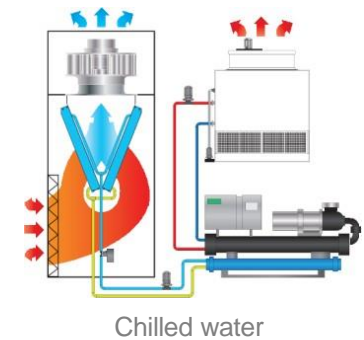
## - Downflow



## Cooling Type


Air-cooled

## - Upflow




Water-cooled


Chilled water

## - Options

- Long Piping Kit

- Low-temperature Kit

- Water Leaking Kit

- RS485 / SNMP Network Monitoring Card

- Automatic Phase Switching Module

- Lightning Protection Module

- High-power Electric Heating System

- Large Color Display

- Remote Temperature and Humidity sensor

- Ultra-quiet Air-cooled Outdoor Condenser

# WiseAir™ – Room Cooling DX Type

## Technical Data

| Upflow Unit / Downflow Unit | W-005FA W-005DA | W-007FA W-007DA | W-012FA W-012DA | W-017FA W-017DA | W-020FA W-020DA | W-025FA W-025DA |
|---|---|---|---|---|---|---|
| Cooling Capacity –kW | 5.5 | 7.5 | 12.5 | 17.5 | 21.2 | 27.5 |
| Sensible Capacity –kW | 5.2 | 6.8 | 11.3 | 15.9 | 19.1 | 25 |
| SHR-% | 94.5 | 90.7 | 90.4 | 90.9 | 90.1 | 90.9 |
| Air Volume -m³/h | 2000 | 2250 | 2850 | 5000 | 6200 | 6700 |
| Fan Type | AC / EC | AC / EC | AC / EC | AC / EC | AC / EC | AC / EC |
| Heating Capacity-kW | 3 | 3 | 4 | 6 | 6 | 6 |
| Heating Type | PTC | PTC | PTC | PTC | PTC | PTC |
| Humidification Capacity -kg/h | 2.5 | 2.5 | 4 | 4.5 | 4.5 | 5 |
| Humidifier Type | Electrode | Electrode | Electrode | Electrode | Electrode | Electrode |
| Filter Rating | G3 | G3 | G3 | G4 | G4 | G4 |
| Weight -kg | 118 | 128 | 178 | 300 | 318 | 338 |
| Width -mm | 550 | 550 | 650 | 750 | 750 | 850 |
| Depth -mm | 450 | 450 | 550 | 700 | 700 | 700 |
| Height -mm | 1750 | 1750 | 1850 | 1900 | 1900 | 1900 |
| Power Input [1] | 208-240V /50Hz|60Hz /1Ph|2Ph | 208-240V /50Hz|60Hz /1Ph|2Ph | 380-415V /50Hz|60Hz /3Ph | 380-415V /50Hz|60Hz /3Ph | 380-415V /50Hz|60Hz /3Ph | 380-415V /50Hz|60Hz /3Ph |
| FLA -A [1] cooling | 14.5 | 16.5 | 13.1 | 14.3 | 19.4 | 23.1 |
| FLA -A [1] with heating/hum. | 28.2 | 30.2 | 19.2 | 23.4 | 28.5 | 32.2 |
| Power Input [2] | - | - | 208V/60Hz/3Ph | 208V/60Hz/3Ph | 208V/60Hz/3Ph | 208V/60Hz/3Ph |
| FLA -A [2] cooling | - | - | 23.9 | 26.2 | 35.4 | 42.2 |
| FLA -A [2] with heating/hum. | - | - | 35.1 | 42.9 | 52.1 | 58.1 |
| Power Input [3] | - | - | 460V/60Hz/3Ph | 460V/60Hz/3Ph | 460V/60Hz/3Ph | 460V/60Hz/3Ph |
| FLA -A [3] cooling | - | - | 10.8 | 11.8 | 16.0 | 19.1 |
| FLA -A [3] with heating/hum. | - | - | 15.8 | 19.3 | 23.5 | 26.6 |
| Ref. Pipe Connection –mm | 10/12 | 10/12 | 12/16 | 16/16 | 16/16 | 16/22 |
| Drain Connection –mm | 20 | 20 | 20 | 20 | 20 | 20 |
| Water In Connection | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G |
| Single/Dual System | Single | Single | Single | Single | Single | Single |
| Refrigerant Type | R410A | R410A | R410A | R410A | R410A | R410A |
| **Standard Outdoor** | | | | | | |
| Unit Model | KSF08 | KSF12 | KSF18 | KSF24 | KSF24 | KSF32 |
| Unit Numbers | 1 | 1 | 1 | 1 | 1 | 1 |

**Notes:**
1, Capacity based on 24℃/50%RH return air conditions, and 45℃ condensing temperature.
2, The standard ESP 20Pa. Higher application shall refer to technical department for confirmation.
3, FLA of indoor unit includes FLA of outdoor unit, and outdoor unit power connected from indoor unit.
4, Standard air-cooled outdoor unit operating temperature range-15℃ above, optional operating temperature range of the components -35℃ with low temperature kit.

# WiseAir™ – Room Cooling DX Type

## Technical Data

| Upflow Unit<br>Downflow Unit | W-030UA<br>W-030DA | W-035UA<br>W-035DA | W-040UA<br>W-040DA | W-050UA<br>W-050DA | W-045UA<br>W-045DA | W-055UA<br>W-055DA | W-065UA<br>W-065DA | W-070UA<br>W-070DA | W-080UA<br>W-080DA | W-090UA<br>W-090DA | W-100UA<br>W-100DA | W-110UA<br>W-110DA | W-120UA<br>W-120DA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cooling Capacity - kW | 32.5 | 37.7 | 41.8 | 50 | 43.5 | 50.1 | 65.1 | 71.1 | 83.6 | 92.1 | 100.9 | 110.9 | 122.9 |
| Sensible Capacity - kW | 29.3 | 34 | 38.1 | 45 | 39.2 | 45.2 | 58.8 | 64 | 75.3 | 83.6 | 91.1 | 97.1 | 105.2 |
| SHR-% | 90.2 | 90.2 | 91.1 | 90.0 | 90.1 | 90.2 | 90.3 | 90.0 | 90.1 | 90.8 | 90.2 | 87.6 | 85.6 |
| Air Volume -m³/h | 8325 | 8620 | 10500 | 12400 | 10500 | 12400 | 16650 | 17240 | 21000 | 22600 | 24800 | 26200 | 27100 |
| Fan Type | EC | EC | EC | EC | EC | EC | EC | EC | EC | EC | EC | EC | EC |
| Heating Capacity - kW | 6 | 6 | 9 | 9 | 9 | 9 | 9 | 9 | 12 | 12 | 12 | 12 | 12 |
| Heating Type | PTC | PTC | PTC | PTC | PTC | PTC | PTC | PTC | PTC | PTC | PTC | PTC | PTC |
| Hum. Capacity -kg/h | 8 | 8 | 10 | 10 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 12 |
| Humidifier Type | Electrode | Electrode | Electrode | Electrode | Electrode | Electrode | Electrode | Electrode | Electrode | Electrode | Electrode | Electrode | Electrode |
| Filter Rating | G4 | G4 | G4 | G4 | G4 | G4 | G4 | G4 | G4 | G4 | G4 | G4 | G4 |
| Weight -kg | 433 | 438 | 468 | 528 | 478 | 568 | 688 | 718 | 768 | 866 | 888 | 910 | 980 |
| Width -mm | 1126 | 1126 | 1326 | 1326 | 1326 | 1326 | 1826 | 1826 | 2026 | 2226 | 2226 | 2426 | 2426 |
| Depth -mm | 990 | 990 | 990 | 990 | 990 | 990 | 990 | 990 | 990 | 990 | 990 | 990 | 990 |
| Height -mm | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 |
| Power Input [1] | 380-415V /50Hz\|60Hz /3Ph | 380-415V /50Hz\|60Hz /3Ph | 380-415V /50Hz\|60Hz /3Ph | 380-415V /50Hz\|60Hz /3Ph | 380-415V /50Hz\|60Hz /3Ph | 380-415V /50Hz\|60Hz /3Ph | 380-415V /50Hz\|60Hz /3Ph | 380-415V /50Hz\|60Hz /3Ph | 380-415V /50Hz\|60Hz /3Ph | 380-415V /50Hz\|60Hz /3Ph | 380-415V /50Hz\|60Hz /3Ph | 380-415V /50Hz\|60Hz /3Ph | 380-415V /50Hz\|60Hz /3Ph |
| FLA -A [1] | 35.5 | 36.3 | 46.0 | 49.6 | 48.2 | 53.8 | 66.4 | 67.2 | 83.0 | 86.6 | 90.2 | 93.8 | 97.2 |
| Power Input [2] | 460V /60Hz /3Ph | 460V /60Hz /3Ph | 460V /60Hz /3Ph | 460V /60Hz /3Ph | 460V /60Hz /3Ph | 460V /60Hz /3Ph | 460V /60Hz /3Ph | 460V /60Hz /3Ph | 460V /60Hz /3Ph | 460V /60Hz /3Ph | 460V /60Hz /3Ph | 460V /60Hz /3Ph | 460V /60Hz /3Ph |
| FLA -A [2] | 29.3 | 30.0 | 38.0 | 41.0 | 39.8 | 44.5 | 54.9 | 55.5 | 68.6 | 71.5 | 74.5 | 77.4 | 80.3 |
| Power Input [3] | 208V /60Hz /3Ph | 208V /60Hz /3Ph | 208V /60Hz /3Ph | 208V /60Hz /3Ph | 208V /60Hz /3Ph | 208V /60Hz /3Ph | 208V /60Hz /3Ph | 208V /60Hz /3Ph | 208V /60Hz /3Ph | 208V /60Hz /3Ph | 208V /60Hz /3Ph | - | - |
| FLA -A [3] | 64.9 | 66.4 | 84 | 90.6 | 88.1 | 98.3 | 121.3 | 122.8 | 151.7 | 158.2 | 164.8 | - | - |
| Pipe Connection -mm | 16/22 | 16/22 | 16/22 | 16/22 | 16/22 | 16/22 | 16/22 | 16/22 | 16/22 | 16/22 | 16/22 | 16/22 | 16/22 |
| Drain Connection -mm | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Water In Connection | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G |
| Single/Dual System | Single | Single | Single | Single | Dual | Dual | Dual | Dual | Dual | Dual | Dual | Dual | Dual |
| Refrigerant | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A |
| **Standard Outdoor** | | | | | | | | | | | | | |
| Unit Numbers | KSF38 | KSF52 | KSF52 | KSF62 | KSF32 | KSF38 | KSF42 | KSF52 | KSF52 | KSF62 | KSF62 | KSF70 | KSF76 |
| Unit Numbers | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

**Notes:**
1, Capacity based on 24℃/50%RH return air conditions, and 45℃ condensing temperature.
2, The standard ESP 20Pa. Higher application shall refer to technical department for confirmation.
3, FLA of indoor unit includes FLA of outdoor unit, and outdoor unit power connected from indoor unit.
4, Standard air-cooled outdoor unit operating temperature range-15℃ above, optional operating temperature range of the components-35℃ with low temperature kit.

# WiseAir™ – Room Cooling CW Type

## Technical Data

| Upflow Unit / Downflow Unit | W-030UC W-030DC | W-040UC W-040DC | W-050UC W-050DC | W-060UC W-060DC | W-070UC W-070DC | W-080UC W-080DC | W-090UC W-090DC | W-100UC W-100DC | W-110UC W-110DC |
|---|---|---|---|---|---|---|---|---|---|
| Total Capacity (7C/12C water temperature) -kW | 38,2 | 50.8 | 62.8 | 76.2 | 89.6 | 100.4 | 113.2 | 124 | 137.6 |
| Total Capacity (10C/15C water temperature) -kW | 30.2 | 39 | 48 | 56.2 | 68.8 | 78 | 86.4 | 95.2 | 104.8 |
| Total Capacity (13C/18C water temperature) -kW | 24 | 31.2 | 37.8 | 44 | 54.8 | 62.4 | 68 | 75,6 | 83.2 |
| SHR -% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Air Volume -m³/h | 9230 | 9610 | 10230 | 11260 | 17100 | 20500 | 18700 | 21360 | 23300 |
| Fan Type | EC/AC | EC/AC | EC/AC | EC/AC | EC/AC | EC/AC | EC/AC | EC/AC | EC/AC |
| Heating Capacity -kW | 6 | 6 | 6 | 6 | 9 | 9 | 9 | 9 | 9 |
| Heating Type | PTC | PTC | PTC | PTC | PTC | PTC | PTC | PTC | PTC |
| Hum. Capacity -kg/h | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 10 |
| Humidifier Type | Electrode | Electrode | Electrode | Electrode | Electrode | Electrode | Electrode | Electrode | Electrode |
| Filter Rating | G4 | G4 | G4 | G4 | G4 | G4 | G4 | G4 | G4 |
| Weight - kg | 303 | 312 | 333 | 352 | 492 | 502 | 512 | 522 | 539 |
| Width -mm | 925 | 925 | 925 | 925 | 1675 | 1675 | 1675 | 1675 | 1825 |
| Depth -mm | 990 | 990 | 990 | 990 | 990 | 990 | 990 | 990 | 990 |
| Height -mm | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 |
| Power Type[1] | 380V /50-60Hz/3P | 380V /50-60Hz/3P | 380V /50-60Hz/3P | 380V /50-60Hz/3P | 380V /50-60Hz/3P | 380V /50-60Hz/3P | 380V /50-60Hz/3P | 380V /50-60Hz/3P | 380V /50-60Hz/3P |
| FLA -A[1] | 22.2 | 22.2 | 22.2 | 22.4 | 38.8 | 38.8 | 38.8 | 38.8 | 39.2 |
| Power Type[2] | 460V/60Hz/3P | 460V/60Hz/3P | 460V/60Hz/3P | 460V/60Hz/3P | 460V/60Hz/3P | 460V/60Hz/3P | 460V/60Hz/3P | 460V/60Hz/3P | 460V/60Hz/3P |
| FLA -A[2] | 18.4 | 18.4 | 18.4 | 18.5 | 32.0 | 32.0 | 32.0 | 32.0 | 32.3 |
| Power Type[3] | 208V/60Hz/3P | 208V/60Hz/3P | 208V/60Hz/3P | 208V/60Hz/3P | 208V/60Hz/3P | 208V/60Hz/3P | 208V/60Hz/3P | 208V/60Hz/3P | 208V/60Hz/3P |
| FLA -A[3] | 40.2 | 40.2 | 40.2 | 40.6 | 75.7 | 75.7 | 75.7 | 75.7 | 76.4 |
| Water Connection -mm | 32 | 32 | 42 | 42 | 42 | 42 | 54 | 54 | 54 |
| Drain Connection -mm | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Water In Connection | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G |
| Water Flow -l/s | 1.4 | 1.6 | 2.2 | 2.6 | 3.3 | 3.7 | 4.1 | 4.5 | 5.0 |
| Water PD -kPa | 49.6 | 55.0 | 63.0 | 57.3 | 57.2 | 73.6 | 63.2 | 77.8 | 85.3 |

**Notes:**
1, Technical data based on 28℃/40%RH return air conditions.
2, The standard ESP 20Pa. Higher application shall refer to technical department for confirmation.
3, Standard with 2 way valves and optional with 3 way valves.

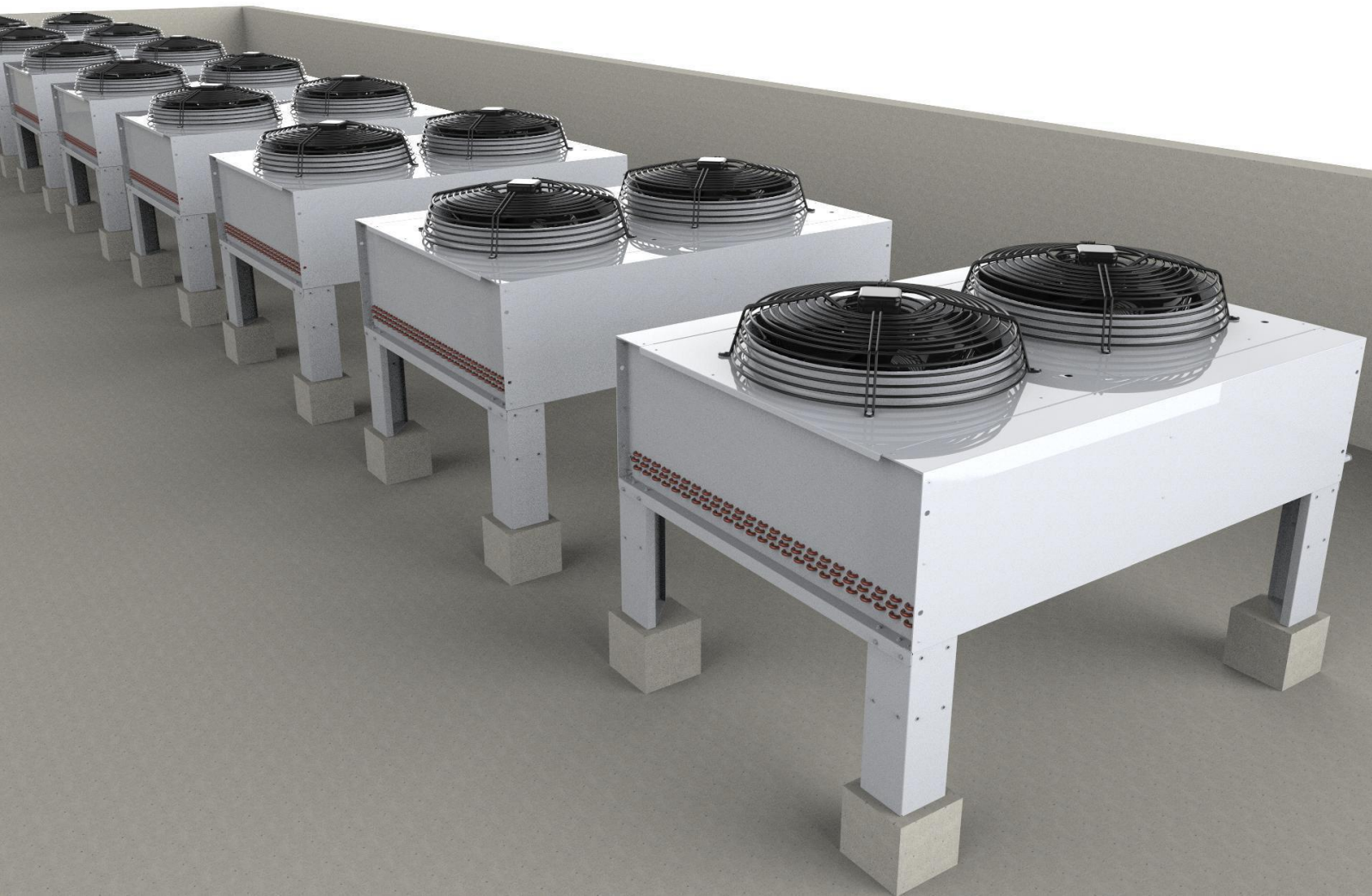# WiseAir™ – Room Cooling CW Type

## Technical Data

| Upflow Unit<br>Downflow Unit | W-120UC<br>W-120DC | W-130UC<br>W-130DC | W-140UC<br>W-140DC | W-150UC<br>W-150DC | W-160UC<br>W-160DC | W-170UC<br>W-170DC | W-180UC<br>W-180DC | W-190UC<br>W-190DC | W-200UC<br>W-200DC |
|---|---|---|---|---|---|---|---|---|---|
| Total Capacity (7C/12C water temperature) -kW | 147,2 | 159.6 | 177.2 | 184,2 | 199.8 | 208.2 | 221.4 | 233.4 | 265.8 |
| Total Capacity (10C/15C water temperature) -kW | 113.5 | 121.2 | 134 | 141 | 151.8 | 159.6 | 171 | 177.6 | 201 |
| Total Capacity (13C/18C water temperature) -kW | 99.2 | 95.2 | 104 | 111.6 | 120 | 126.6 | 135.6 | 139.2 | 156 |
| SHR -% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Air Volume -m³/h | 25960 | 25030 | 26120 | 31680 | 33120 | 35460 | 39100 | 36010 | 38500 |
| Fan Type | EC/AC | EC/AC | EC/AC | EC/AC | EC/AC | EC/AC | EC/AC | EC/AC | EC/AC |
| Heating Capacity -kW | 9 | 9 | 9 | 12 | 12 | 12 | 12 | 12 | 12 |
| Heating Type | PTC | PTC | PTC | PTC | PTC | PTC | PTC | PTC | PTC |
| Hum. Capacity -kg/h | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Humidifier Type | Electrode | Electrode | Electrode | Electrode | Electrode | Electrode | Electrode | Electrode | Electrode |
| Filter Rating | G4 | G4 | G4 | G4 | G4 | G4 | G4 | G4 | G4 |
| Weight - kg | 553 | 562 | 585 | 772 | 792 | 812 | 822 | 842 | 852 |
| Width -mm | 1825 | 1825 | 1825 | 2500 | 2725 | 2725 | 2725 | 2725 | 2725 |
| Depth -mm | 990 | 990 | 990 | 990 | 990 | 990 | 990 | 990 | 990 |
| Height -mm | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 | 1975 |
| Power Type[1] | 380V /50-60Hz/3P | 380V /50-60Hz/3P | 380V /50-60Hz/3P | 380V /50-60Hz/3P | 380V /50-60Hz/3P | 380V /50-60Hz/3P | 380V /50-60Hz/3P | 380V /50-60Hz/3P | 380V /50-60Hz/3P |
| FLA -A[1] | 39.2 | 39.2 | 39.2 | 47.3 | 47.3 | 47.9 | 47.9 | 47.9 | 47.9 |
| Power Type[2] | 460V/60Hz/3P | 460V/60Hz/3P | 460V/60Hz/3P | 460V/60Hz/3P | 460V/60Hz/3P | 460V/60Hz/3P | 460V/60Hz/3P | 460V/60Hz/3P | 460V/60Hz/3P |
| FLA -A[2] | 32.3 | 32.3 | 32.3 | 39.1 | 39.1 | 39.6 | 39.6 | 39.6 | 39.6 |
| Power Type[3] | 208V/60Hz/3P | 208V/60Hz/3P | 208V/60Hz/3P | 208V/60Hz/3P | 208V/60Hz/3P | 208V/60Hz/3P | 208V/60Hz/3P | 208V/60Hz/3P | 208V/60Hz/3P |
| FLA -A[3] | 76.4 | 76.4 | 76.4 | 91.3 | 91.3 | 92.4 | 92.4 | 92.4 | 92.4 |
| Water Connection -mm | 54 | 54 | 54 | 66.8 | 66.8 | 66.8 | 66.8 | 66.8 | 66.8 |
| Drain Connection -mm | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Water In Connection | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G | 3/4"G |
| Water Flow -l/s | 5.4 | 5.7 | 6.1 | 6.7 | 7.2 | 7.5 | 8.1 | 8.3 | 8.9 |
| Water PD -kPa | 99.9 | 77.8 | 80.1 | 74.1 | 76.5 | 84.1 | 97.8 | 71.5 | 74.1 |

**Notes:**
1, Technical data based on 28℃/40%RH return air conditions.
2, The standard ESP 20Pa. Higher application shall refer to technical department for confirmation.
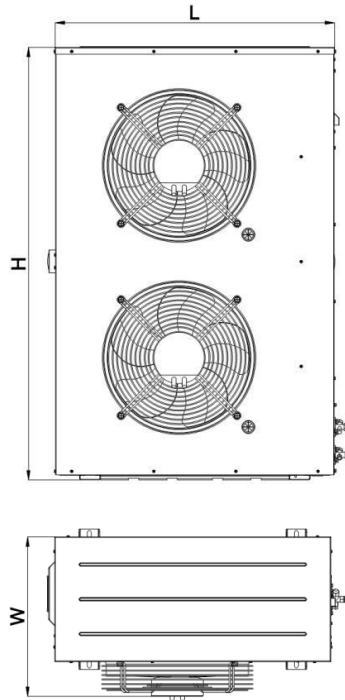3, Standard with 2 way valves and optional with 3 way valves.
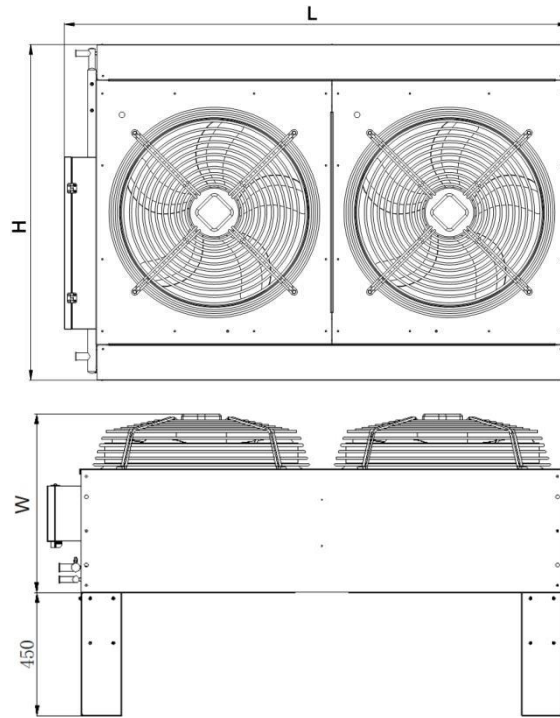
# Air Cooled Condenser

# Key Configurations

- EC Fan Stepless Speed Adjusting

- Standard Quick Connector

- Efficient Finned with Heat Transfer Enhancement

- Inverter Drived Fan Stepless Speed Adjusting

- Internally Threaded Piping

- High-quality Anti-corrosion Coating

- Protective Structure for Piping Headers

- IP55 Waterproof Electrical Box

- Internally Threaded Piping

- High-quality Anti-corrosion Coating

- IP55 Waterproof Electrical Box

KSF08 - KSF18



KSF24 - KDF85

## Technical Data

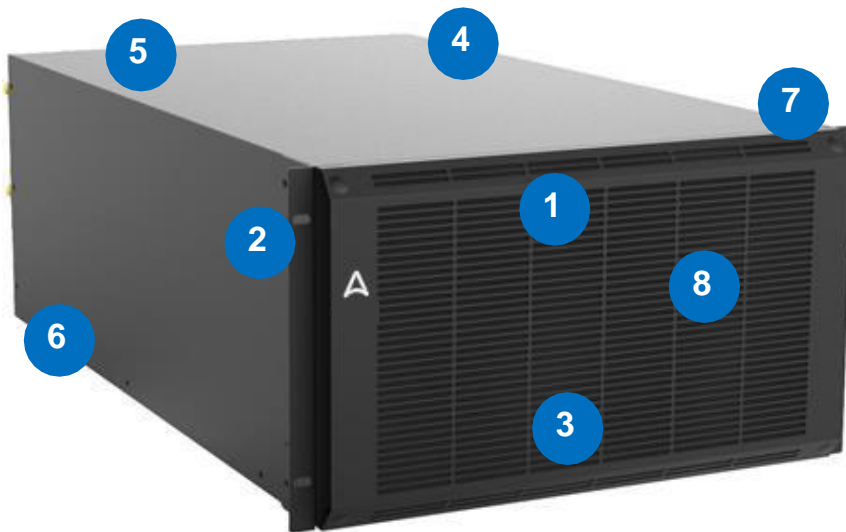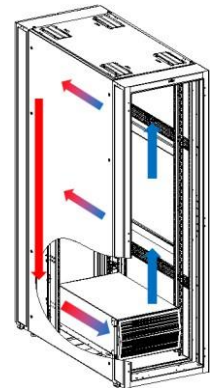| Model | KSF08AN | KSF12AN | KSF18AN | KSF24AN | KSF32AN | KSF38AN | KSF42AN | KSF52AN | KSF62AN | KSF70AN | KSF76AN | KSF85AN | KDF62AN | KDF70AN | KDF76AN | KDF85AN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Single/Dual System | Single | Single | Single | Single | Single | Single | Single | Single | Single | Single | Single | Single | Dual | Dual | Dual | Dual |
| Weight -kg | 28 | 40 | 67 | 105 | 110 | 120 | 130 | 140 | 150 | 150 | 220 | 230 | 160 | 160 | 220 | 230 |
| Depth –mm | 420 | 420 | 420 | 990 | 990 | 990 | 1273 | 1273 | 1273 | 1273 | 1273 | 1273 | 1273 | 1273 | 1273 | 1273 |
| Width -mm | 800 | 800 | 800 | 1407 | 1407 | 1407 | 1607 | 1607 | 1907 | 1907 | 2407 | 2407 | 2107 | 2107 | 2407 | 2407 |
| Height -mm | 790 | 790 | 1240 | 689 | 689 | 695 | 695 | 695 | 689 | 689 | 695 | 695 | 689 | 689 | 695 | 695 |
| Leg Height | - | - | - | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 |
| Power Input[1] | 208-240V /50-60Hz /1Ph|2P | 208-240V /50-60Hz /1Ph|2P | 208-240V /50-60Hz /1Ph|2P | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph | 380-415V /50-60Hz /3Ph |
| FLA –A[1] | 1.5 | 1.5 | 3.0 | 2.0 | 2.0 | 2.8 | 2.8 | 2.8 | 4.0 | 4.0 | 5.6 | 5.6 | 4.0 | 4.0 | 5.6 | 5.6 |
| Power Input[2] | - | - | - | 460V /50-60Hz /3Ph | 460V /50-60Hz /3Ph | 460V /50-60Hz /3Ph | 460V /50-60Hz /3Ph | 460V /50-60Hz /3Ph | 460V /50-60Hz /3Ph | 460V /50-60Hz /3Ph | 460V /50-60Hz /3Ph | 460V /50-60Hz /3Ph | 460V /50-60Hz /3Ph | 460V /50-60Hz /3Ph | 460V /50-60Hz /3Ph | 460V /50-60Hz /3Ph |
| FLA –A[2] | - | - | - | 1.7 | 1.7 | 2.4 | 2.4 | 2.4 | 3.3 | 3.3 | 4.8 | 4.8 | 3,3 | 3.3 | 4.8 | 4.8 |
| Piping Connection -mm | 10/12 | 10/12 | 12/16 | 16/22 | 16/22 | 16/22 | 16/22 | 22/28 | 22/28 | 22/28 | 22/28 | 22/28 | 22/28 | 22/28 | 22/28 | 22/28 |

**Notes:**
1, KSF08-KSF18 is vertical installation;
2, KSF24 and above is horizontal/vertical adaptive;

# SmoothAir™ – Rack Mount

Air cooled, rack mount, split type, suitable for micro data center, mini modular data center solutions.

## 3.9kW-12.0kW

**1** Inverter compressor and EC fan works at high efficiency, maintains temperature within envelop and prevent compressor from cycling during low heat load period.

**2** Standard rack mount structure fully compatible with server rack is flexible for future expansion.

**3** Precision cooling controller monitors and protects unit constantly. Easy to be integrated into BMS to display, control and manage the system.

**4** Slide drawer style electric box makes service easier.

**5** Copper piping adopts quick connection and supports bottom and top connections.

**6** Compressor locating in outdoor unit lowers the noise level then better suits customer expectation of mini data center application.

**7** R410A green refrigerant is highly efficient and no ODP.

**8** Front air outlet suitable for installation on flexible height in a rack.

# SmoothAir™ – Rack Mount

## Technical Data

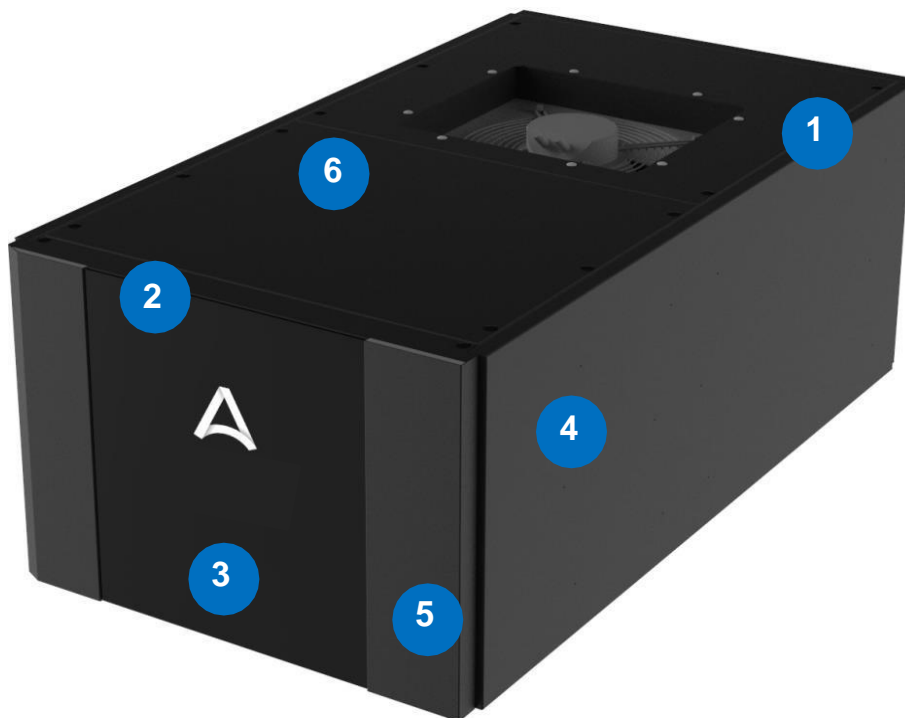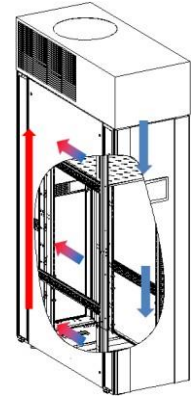| Model | S-003KA | S-005KA | S-007KA | S-012KA |
|---|---|---|---|---|
| Total Capacity-kW | 3.9 | 5.9 | 8.6 | 12.8 |
| SHR -% | 100 | 100 | 100 | 100 |
| Air Volume -m3/h | 700 | 1800 | 2000 | 2400 |
| Mount Type | Rack | Rack | Rack | Rack |
| Height –mm | 266(6U) | 355(8U) | 445(10U) | 533(12U) |
| Depth –mm | 828 | 828 | 828 | 828 |
| Width –mm | 483 | 483 | 483 | 483 |
| Weight –kg | 31 | 43 | 52 | 70 |
| Reheat(optional) –kW | 1.2 | 1.2 | 2.4 | 2.4 |
| Hum.(optional) -kg/h | - | - | - | - |
| Power Input[1] | 208-240V/50-60Hz/1Ph-2Ph | 208-240V/50-60Hz/1Ph-2Ph | 208-240V/50-60Hz/1Ph-2Ph | 380-415V/50-60Hz/3Ph |
| FLA –A[1] | 13.9 | 15.2 | 21.6 | 18 |
| Power Input[2] | - | - | - | 208V/60Hz/3Ph |
| FLA –A[2] | - | - | - | 32.9 |
| **Outdoor Unit** | KSF06AC | KSF08AC | KSF12AC | KSF18AC |
| Height -mm | 632 | 790 | 790 | 1240 |
| Depth -mm | 395 | 420 | 420 | 420 |
| Width -mm | 800 | 820 | 820 | 820 |
| Leg Height -mm | - | - | - | - |
| Weight -kg | 35 | 38 | 50 | 77 |
| Power Input[1] | 208-240V/50-60Hz/1Ph-2Ph | 208-240V/50-60Hz/1Ph-2Ph | 208-240V/50-60Hz/1Ph-2Ph | 380-415V/50-60Hz/3Ph |
| FLA –A[1] | 12.6 | 13.2 | 19.6 | 16 |
| Power Input[2] | - | - | - | 208V/50-60Hz/3Ph |
| FLA –A[2] | - | - | - | 29.3 |

**Notes:**
1, Air flow is based upon maximum setting. Fan modulates per real loads.
2, Cooling capacity based on 37℃/24%RH return air and 35℃ outdoor temperature with the standard condenser.
3, FLA of indoor unit includes FLA of outdoor unit, and outdoor unit power connected from indoor unit.
4, Standard unit works -15℃ and above outdoor temperature. Select low temperature kit to work -35℃ and above outdoor temperature.

# SmoothAir™ – Top Mount Package DX

Air cooled, top mount, indoor and outdoor packaged, suitable for micro data center, mini modular data center solutions.

## 2.5kW – 5.5kW

**1** Industry top brand compressor. Highly reliable and efficient.

**2** Precision cooling controller monitors and protects unit constantly. Easy to be integrated into BMS to display, control and manage the system.

**3** Compatible with standard rack size forms unified and integrated micro data center solution.

**4** Packaged design easy for installation, service and shipping.

**5** Top mount means good air management of hot/cold stream and no occupying of IT space.

**6** Green refrigerant is highly efficient and no ODP.

# SmoothAir™ – Top Mount Package DX

## Technical Data

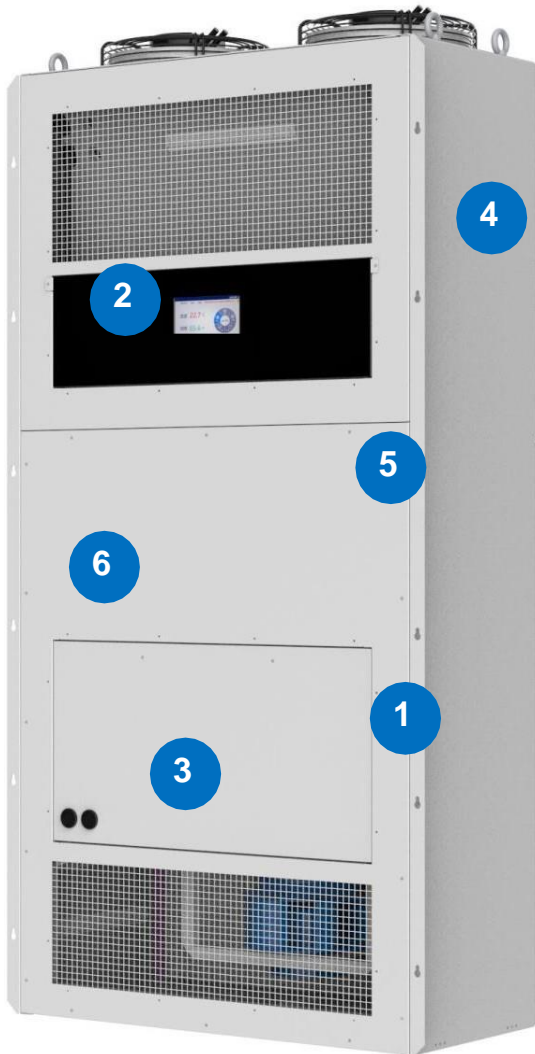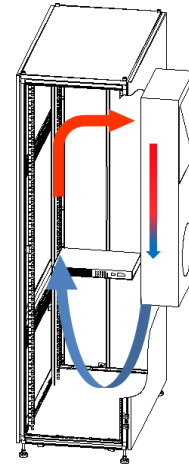| Unit | S-002TA | S-003TA | S-005TA |
|---|---|---|---|
| Total Cooling-kW | 2.5 | 3.5 | 5.5 |
| SHR-% | 100 | 100 | 100 |
| Air Volume-m3/h | 500 | 600 | 900 |
| Mount Type | Top | Top | Top |
| Cooling Type | DX | DX | DX |
| Height-mm | 390(9U) | 390(9U) | 521(12U) |
| Depth-mm | 1100 | 1100 | 1100 |
| Width-mm | 600 | 600 | 600 |
| Weight-kg | 50 | 55 | 65 |
| Power Input | 208-240V/50Hz-60Hz/1Ph-2Ph | 208-240V/50Hz-60Hz/1Ph-2Ph | 208-240V/50Hz-60Hz/1Ph-2Ph |
| FLA-A | 5.5 | 6.5 | 7.8 |

**Notes:**
1.    Cooling capacity  based on 37℃/24%RH return air and 35℃ outdoor air.
2.    Options including SNMP monitoring protocol, condensate evaporation kit.

# SmoothAir™ – Wall Mount Package DX

Air cooled, wall mount, indoor and outdoor packaged, suitable for micro data center, mini modular data center solutions.

## 5.5kW–21.2kW

**1** Industry top brand compressor. Highly reliable and efficient.

**2** Precision cooling controller monitors and protects unit constantly. Easy to be integrated into BMS to display, control and manage the system.

**3** Adopts high pressure/high air flow centrifugal blower suiting critical equipment cooling condition.

**4** Packaged design easy for installation, service and shipping.

**5** Wall mounting to side of cabinet no occupying of IT space.

**6** Green refrigerant is highly efficient and no ODP.
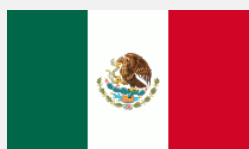
# SmoothAir™ – Wall Mount Package DX

## Technical Data

| Unit | S-005WA | S-007WA | S-012WA | S-017WA | S-020WA |
|---|---|---|---|---|---|
| Total Cooling-kW | 5.5 | 7.5 | 12.5 | 17.5 | 21.2 |
| SHR-% | 100 | 100 | 100 | 100 | 100 |
| Air Volume-m3/h | 1850 | 2000 | 2400 | 3500 | 4000 |
| Mount Type | Wall | Wall | Wall | Wall | Wall |
| Cooling Type | DX | DX | DX | DX | DX |
| Height-mm | 1920 | 1920 | 2100 | 2100 | 2100 |
| Depth-mm | 650 | 650 | 650 | 650 | 650 |
| Width-mm | 900 | 900 | 1000 | 1000 | 1000 |
| Weight-kg | 180 | 230 | 285 | 320 | 355 |
| Power Input[1] | 208-240V /50Hz\|60Hz /1Ph-2Ph | 208-240V /50Hz\|60Hz /1Ph-2Ph | 380-415V /50Hz\|60Hz /3Ph | 380-415V /50Hz\|60Hz /3Ph | 380-415V /50Hz\|60Hz /3Ph |
| FLA-A[1] | 15.6 | 17.6 | 16.0 | 19.5 | 27.5 |
| Power Input[2] | - | - | 460V/60Hz/3Ph | 460V/60Hz/3Ph | 460V/60Hz/3Ph |
| FLA-A[2] | - | - | 12.4 | 16.2 | 22.8 |

**Notes:**
1. Cooling Capacity based on 26℃/40%RH return air and 35℃ outdoor air.
2. The frequency 50Hz or 60Hz is choiceable upon order.
3. The refrigerant R134a is used for the ambient temperature up to 55C maximum.

# Our Global Deployments

We believe the world is being totally connected. The connections are creating digital intelligence and a better future.

We create prefabricated micro data center products to build foundation of digital future.

**Contact**

**Adeo Projects Co.,Ltd.**

Call us
+6697 246 6555

Email us
admin@adeo-projects.com

Visit us on web http://www.adeo-projects.com