PRECISION
COOLING

INTELLIGENT
POWER

INTEGRATED
DCIM

SERVER
RACK

ARCTIV™

MICRO DATA CENTER RACKS
INTELLIGENT RACK, POWER & COOLING SOLUTIONS

PRODUCT BROCHURE

www.arctiv-tech.com/mdc-rack

Micro Data Center Racks
PRODUCT FEATURES

All-In-One Solution

Power

Connect

Servers

Protect

Cool

Micro Data Center Rack

Intelligent Rack Solutions with built-in Power, Cooling, Security and DCIM

All-In-One Solution

Ideal for Storing and Managing Edge-Servers in On-Premise or Remote Applications

System Features

Beautiful Appearance
Attractive steel rack construction with tempered glass and sleek HMI for office-friendly installation.

Security
Access control handle with 3-in-1 password, fingerprint and RFID protection and mechanical locking options

Easy Installation
Minimal site preparation required for installing and commissioning the system with easy replacement of cooling unit.

Precision Cooling
User-adjustable set-point with efficient cold-aisle isolation for maximum equipment performance.

Environmental Sensors
Built-in rack sensors for monitoring temperature, humidity, door, water and smoke with automated alerts.

Remote Management
Monitor power and cooling performance with automated alerts and compatible with LINE app's

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DCIM & Remote Monitoring

- 10.1" HMI & 1U Network Host
- Integrated Rack Sensors
- Email & LINE alerts

Intelligent PDU

- Monitoring System
- Switched & Metered Outlets
- Accessible via DCIM

Power Distribution Module

- C-Level Surge Protection
- Rackmount Design
- Connects UPS, Cooling & PDU

Online UPS

- 6 & 10kVA Rackmount Units
- Double-Conversion
- External Battery Modules

Front View
Micro Data Center Rack with
Split-Type Cooling, 3.7kW

Split-Type Cooling Unit

- 3.7 & 7.5kW Cooling Capacity
- Outdoor Condenser
- Rackmount Blower

Integrated Cooling Unit

- 3.7kW Cooling Capacity
- Internal Condenser
- Rackmount Unit

Integrated Cooling Unit
All-in-One Condenser and Blower for Simple and Flexible Installation Options

All-in-One Cooling Unit
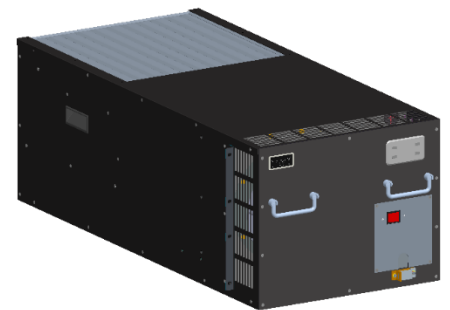Built-in Condenser and Rear-Exhaust

Rear Hot-Air Exhaust
Capable to Connect to the Building Return Duct System

Integrated Cooling Unit
- Rackmount, 8U
- Constant Temp Set-Point

Advantages:
- ✓ Easy to Install & Service
- ✓ Flexible to Select Location
- ✓ Reduced Water Leakage Risk

Split-Type Cooling Unit
Internal Blower and External Condenser for High Capacity, Low Noise Operation
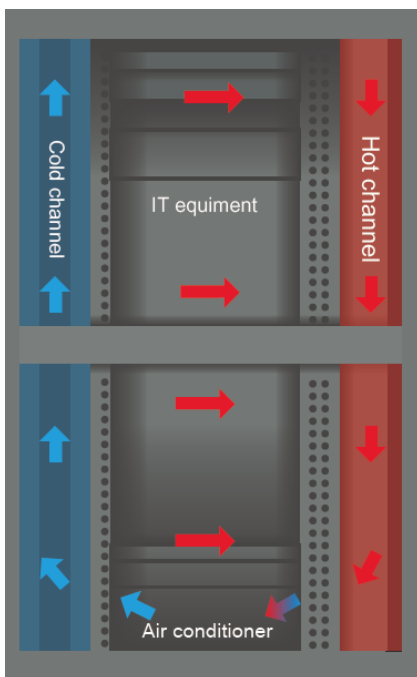
Front Cold Channel
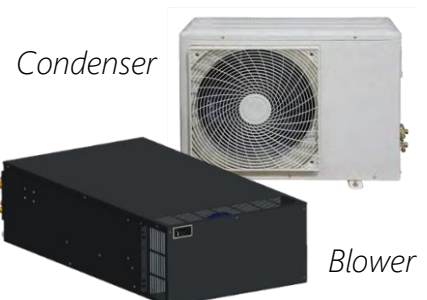Precision Cooling with Internal Blower

Rear Hot-Aisle
Fully Sealed Rear Channel for Contained Hot Air

Outdoor Exhaust
Efficient Operation To Remove the Heat from the Room

Advantages:
- ✓ High Cooling Capacity Options
- ✓ Lower Noise for Offices
- ✓ Reduced Heat Output

Condenser

Blower

Split-Type Cooling Unit
- Rackmount Blower, 5 & 7U
- Constant Temp & Humid

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DCIM & Remote Monitoring
SYSTEM OVERVIEW

Environmental Monitoring System, 1U

On-Screen HMI
1. 10.1" Display with Password Protection
2. Access Real-Time System Information

Remote Access
1. Web-Portal with Password Protection
2. Automated Alerts via email & LINE app

Power Management

UPS & Battery

Power Distribution

- Monitor UPS & Battery
- Input & Output Voltage
- Intelligent PDU Monitoring
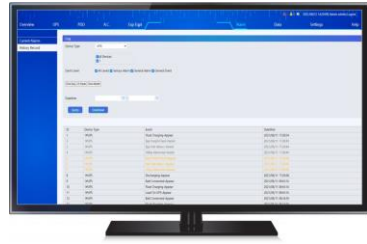
Environmental Management

Precision A/C

Rack Sensors

- System Temp, Humidity, Water Leakage, Smoke Detection
- Cooling Monitoring & Control
- Door Access Control

Remote Monitoring & Alerts

Alerts

Web Access

- Measures System Performance (PUE)
- Remote Access & Alerts (Email & LINE)

5G Private Networks / Manufacturing / Logistics
Maintain Network Security and Minimize Latency in Industrial Environments.

Private 5G Networks & Cell Stations
- Automated Material Handling
- Stadiums & Public Facilities

Manufacturing & Logistics
- Engineering & Test Labs
- Manufacturing Cells

Rear View

Application Benefits
- ✓ Minimize Network Latency
- ✓ On-Site IT Device Security
- ✓ Robust Environmental Ratings
- ✓ Remote Management & Alerts
- ✓ Precision Power & Cooling
- ✓ Protects From Power-Line Noise
- ✓ Enhanced Security

Corporate Offices / Education / Healthcare
Eliminate the IT Room by Storing IT Equipment in Open Office Environments

Corporate Offices
- Branch Offices & High-Rise Buildings
- Finance & Government

Education & Healthcare
- Smart Classrooms & Remote Learning
- Private Clinics & Telehealth

Front View

Application Benefits
- ✓ Eliminate the IT Room
- ✓ Minimize Network Latency
- ✓ Easy to Install and Manage
- ✓ Fits through Doorways & Elevators
- ✓ Remote Management & Alerts
- ✓ Precision Power & Cooling
- ✓ Enhanced Security

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Micro Data Center Racks
SPECIFICATIONS

PARAMETER		INTEGRATED COOLING 3.7KW	SPLIT-TYPE COOLING 3.7KW	SPLIT-TYPE COOLING 7.5KW
Racks	Dimensions (Server Rack)	2070mmH x 600mmW x 1200mmD		
	Dimensions (Network Rack)	2070mmH x 800mmW x 1400mmD		
	Load Rating	1500kg (Static)		
	Protection Level	IP5X (Front), IP2X (Rear)	IP5X (Front & Rear)	
	Front Door	Tempered Glass (Solid)		
	Rear Door	Solid Steel (Rear Exhaust)	Solid, Steel	
	Roof	Solid with Cable Entry Grommets		
	Side Panels	Solid, Locking		
	Total Available IT Space	25 RMU	28 RMU	26 RMU
	Over-Temp Operation	Automatic Door Release		
Power Distribution	Power Distribution Module	UPS Input, Maintenance Bypass, UPS Output, Cooling Input, PDU Breakers, Lighting Protection		
	Input Power	220VAC, 1P, 60Hz		
	Power Distribution Unit	2 x Basic (0U), 1P 32A,13xC13, 3xC19 (Customized Outlets Available) Intelligent PDU Available (Metered Outlet & Managed)		
UPS	Capacity	6kVA (PF=1.0), Online, Double-Conversion		10kVA (PF=1.0), Online, Double-Conversion
	Back-Up	10 Minutes @ 3kW Load		5 Minutes @ 7kW Load
Cooling	Cooling Capacity	3.7kW	3.7kW	7.5kW
	Input Power	220VAC, 50 or 60Hz		
	Cooling Types	Integrated Precision A/C, DX-Type	Split-Type Precision A/C, DX-Type	
	Cooling Unit Dimensions	8RMU	5RMU	7RMU
	Cooling Unit Mounting	Rackmount (Bottom) for Easy Water Drainage		
	Outdoor Unit	N/A	Yes	
	Cooling Agent	R410A (Environmentally Friendly)		
DCIM	HMI	10.1" LCD Touch Panel		
	Monitoring Hose	Network Controller, 1RMU		
	Web-Based Access	Linux		
	Monitoring Functions	Temp & Humid, UPS, Cooling, Smoke, Water, Door Webcam (Optional), Infrared Detection (Optional)		
	Alert Communications	LINE App (Optional), Email		
Environment	Operating Temp	$0^0C \sim 45^0C$		
	Rel. Humidity	10 – 95%, Non-Condensing		

Notes: *Specifications shown are subject to change without any further notification.*

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Power   **Protect**   **Cool**   **Connect**

ArcTiv Technologies is a global technology vendor whose mission is to Power, Protect, Cool and Connect your data center and edge-computing network infrastructure.

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ATMDCR_BR_REV2
Release Date: 12.14.2021