



*Integrated Cooling*



*Split Cooling*



*In-Row Cooling*

# MICRO DATA CENTER INDOOR SOLUTIONS

Brochure

# ArcTiv Technologies

## Data Center and Edge-Computing Infrastructure Solutions

**YOUR DATA CENTER & IT SOLUTIONS PARTNER**



ArcTiv Technologies is a USA-based data center & IT solutions provider delivering high-performance products to **Power, Protect, Cool and Connect** your critical network infrastructure.

Our global application experts develop and deliver turnkey IT solutions, ensuring optimal system performance and reducing your supply chain complexity.

Find out more about our products and consulting services by contacting your local representative or visiting our website at:

[www.arctiv-tech.com](http://www.arctiv-tech.com)

### Key Applications and Industries Served

#### White Space Solutions



Data Center



Colocation



Server Room

#### Edge-Computing Solutions for the Office



High-Rise Buildings

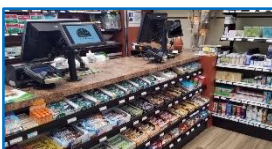


Conference Rooms



Healthcare

#### Edge-Computing Solutions in Retail



Convenience Stores



Shopping Centers



Restaurants / Café

#### Edge-Computing Solutions in Manufacturing



Factory Automation



Warehouse & Logistics



Airports

### Product Line Overview

Power	Protect	Cool	Connect



# Micro Data Center with Precision Cooling

## Edge-Computing Application Overview

### Edge-Computing in the Office



#### Micro Data Center Advantages

- ✓ No dedicated IT room (< CAPEX)
- ✓ Lower power & cooling costs (< OPEX)
- ✓ Can run during off-business hours
- ✓ Remote management & alarms
- ✓ Internal fire protection
- ✓ Greater equipment reliability
- ✓ Electronic access control
- ✓ Low-noise (with external condenser)

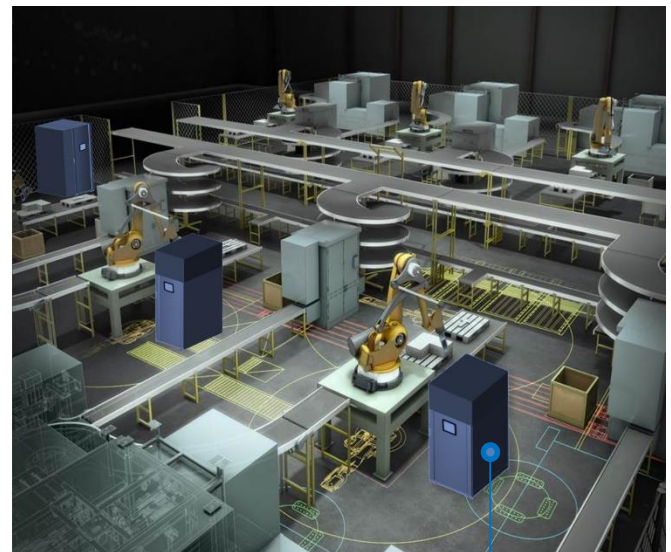
### Edge-Computing in Retail



#### Micro Data Center Advantages

- ✓ No dedicated IT room (< CAPEX)
- ✓ Lower power & cooling costs (< OPEX)
- ✓ Protects against temperature, humidity and dust (IP5X)
- ✓ Can run during off-business hours
- ✓ Remote management & alarms
- ✓ Internal fire protection
- ✓ Greater equipment reliability
- ✓ Electronic access control & video camera monitoring

### Edge-Computing in Manufacturing



#### Micro Data Center Advantages

- ✓ Lower cabling costs (< CAPEX)
- ✓ Lower power & cooling costs (< OPEX)
- ✓ Lower equipment latency
- ✓ Protects against temperature, humidity and dust (IP5X)
- ✓ Remote management & alarms
- ✓ No external piping required (with integrated cooling)
- ✓ Greater equipment reliability
- ✓ Electronic access control & video camera monitoring

# Micro Data Center with Precision Cooling

## Single Rack, Indoor System Overview

All-in-One Power, Protect, Cool and Connect Solution for Edge-Computing Applications

Power	Protect
 <p>Rack-Mount UPS, Battery &amp; Power Distribution Module (PDM)      Power Distribution Unit (PDU)</p>	 <p>Rack      Access Control      IP Camera      Fire Suppression</p>
<p><b>Key Features:</b></p> <ul style="list-style-type: none"> <li>✓ Rack-mount UPS (N+1 and 2N options)</li> <li>✓ External batteries for up to 1 hour back-up</li> <li>✓ Surge and lightning protection</li> <li>✓ Maintenance bypass</li> <li>✓ Basic or managed (switched) PDU's</li> <li>✓ Remote device reboot (via managed PDU)</li> </ul>	<p><b>Key Features:</b></p> <ul style="list-style-type: none"> <li>✓ IP4X &amp; IP5X for indoor applications</li> <li>✓ 600 &amp; 800mmW with cable management</li> <li>✓ Magnetic locking system</li> <li>✓ Overtemperature door release</li> <li>✓ 3-in-1 access control (fingerprint, RFID, PIN)</li> <li>✓ Rackmount automatic fire suppression</li> <li>✓ IP camera and NVR</li> </ul>
Cool	Connect
 <p>Integrated Cooling Unit (Top-Mount)      Rack-Mount Blower With External Condenser</p>	 <p>Monitoring System with Remote Management</p>
<p><b>Key Features:</b></p> <ul style="list-style-type: none"> <li>✓ DX-type cooling</li> <li>✓ User adjustable internal temperature setting</li> <li>✓ Humidity control (up to 95% non-condensing)</li> <li>✓ Environmentally friendly agent (R410A)</li> <li>✓ Easy set-up (integrated unit)</li> <li>✓ Low-noise (split unit)</li> <li>✓ High-capacity (side-mount unit)</li> </ul>	<p><b>Key Features:</b></p> <ul style="list-style-type: none"> <li>✓ 10" HMI with built-in network controller</li> <li>✓ Temperature, humidity, smoke, water &amp; door sensors</li> <li>✓ Real-time power, cooling &amp; environmental monitoring</li> <li>✓ Web access and SMS alarms</li> <li>✓ Password protected</li> </ul>

# Micro Data Center with Precision Cooling

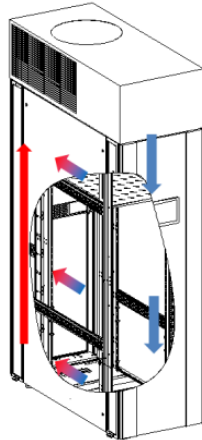
## Single Rack Cooling System Overview

Full Range of Cooling Configurations to Support Your Edge-Computing Application

### Integrated Cooling System



*Top-Mount Cooling Unit with Integrated Condenser (All-in-one)*



- ✓ Ideal for medium power applications (up to 5.5kW)
- ✓ Easiest to install
- ✓ High external temperature and humidity ratings
- ✓ Up to IP5X rating
- ✓ Lowest total cost (incl. installation)
- ✓ Automatic overtemperature door release

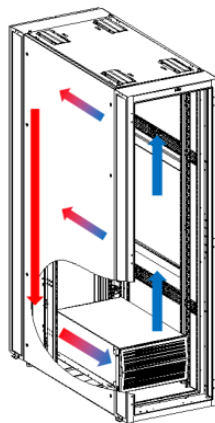
### Split Cooling System



*Rack-Mount Blower*



*External Condenser*



- ✓ Ideal for medium-power applications (up to 5.0kW)
- ✓ Lowest noise & heat dissipation (ideal for offices)
- ✓ High external temperature and humidity ratings
- ✓ Up to IP5X rating
- ✓ Greater RMU capacity
- ✓ Automatic overtemperature door release

### In-Row Cooling System



*External Condenser*



*Side-Mount Blower*

- ✓ Ideal for high-power applications (up to 7.6kW)
- ✓ Greatest RMU capacity
- ✓ High external temperature and humidity ratings
- ✓ Up to IP5X rating
- ✓ Automatic overtemperature door release

# Micro Data Center with Precision Cooling

## Remote and Emergency Operation

### Remote Operation

Each MDC includes an all-in-one HMI and controller which directly controls the cooling, power and sensors. The MDC is remotely accessible with the following features:

- Real-time power, cooling and environment monitoring
- System configuration
- Alarm settings & event logs
- Automatic emails during alarm events
- Electronic door release
- Password protection
- Modbus (standard) with optional SNMP converter

### 10" HMI & Controller



Temp, Humidity, Smoke, Water, Doors, LED Lighting



Sensors & Accessories

UPS



Cooling Unit



Remote Monitoring



Real-Time Monitoring



Alarms & System Configuration

### Emergency Over-Temperature Operation

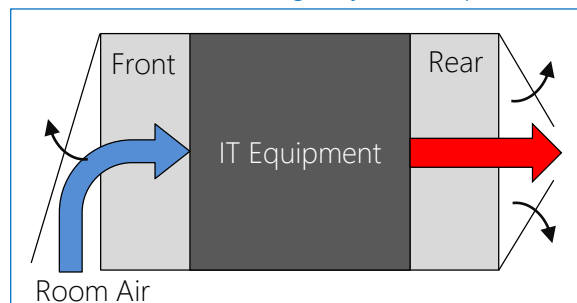
In case of an over-temperature, the electronic doors can automatically release to allow external air to enter the enclosure.

#### Dual-Type Door with Glass Inlet

Upgradeable front door with glass inlet and vented base. In case of over-temperature, the glass inlet will release while the vented door remains closed.



#### Emergency Door Operation



# Micro Data Center with Precision Cooling

## Technical Specifications



Cooling Type	Integrated Cooling Top Mount, DX-Type	Split Cooling Rack Mount, DX-Type	In-Row Cooling Side-Mount, DX-Type
Cooling Capacity	2.5kW, 3.5kW, 5.5kW	3.9kW, 5.0kW	5.6kW, 7.6kW
Cooling Agent	R410A		
IP Rating	IP4X, IP5X		
Total RMU	24, 33	42	42
Available RMU (excl. battery)	19, 28	32	37
Rack Heights	1600mm, 2100mm	2100mm	2100mm
Rack Widths	600mm, 800mm	600mm, 800mm	900mm, 1100mm
Rack Depths	1100mm, 1200mm	1100mm, 1200mm	1200mm, 1400mm
External Temp & Humid	45°C, 95% non-condensing		
UPS Capacity	3kVA, 6kVA, 10kVA	6kVA, 10kVA	10kVA
External Batteries	Up to 1 hour, external		
Power Distribution Module (PDM)	Maintenance Bypass, Surge Protection		
Power Distribution Unit (PDU)	Basic (optional Managed)		
Display	10" HMI with built-in network controller		
Sensors	Temp, Humid, Door (2), Smoke, Water		
Over-Temperature Protection	Automatic Door Release, Optional Dual Vented/Glass Door		
LED Lighting	Front (Blue) & Rear (Red)		
Fire Suppression	Rackmount (1U, or 3U)		
Video Monitoring	IP Camera + NVR		
Access Control	3-in-1 Access Control (RFID, Fingerprint, Passcode)		
Door Locking System	Magnetic Locks (2)		
Noise Rating @ 1M	< 60dB	< 55dB	< 65dB
Warranty	1 Year (extended available)		

**Note:**

- Products are engineered and built to order and can be customized to the user requirement.
- Specifications shown are recommended solutions and are subject to change without any further notification.



**USA**

ArcTiv Technologies, LLC  
30 N Gould St Ste R,  
Sheridan, WY 82801, USA  
sales@arctiv-tech.com  
www.arctiv-tech.com



**Taiwan**

Auqi Technologies, Ltd.  
15f., No. 159, Sec 1, Keelung Rd., Xinyi Dist.  
Taipei City, 110, Taiwan (R.O.C.)  
daniel.james@arctiv-tech.com  
Phone: +886 926227738



**Bangladesh**

lftekhar.priyom@arctiv-tech.com  
Phone: +880 171 1081159



Follow us on social media to get the latest product and support information.



© 2019 ArcTiv Technologies, LLC. All rights reserved. ArcTiv and the ArcTiv logo are trademarks or registered trademarks of ArcTiv Technologies, LLC. While every precaution has been taken to ensure accuracy and completeness herein, ArcTiv Technologies LLC assumes no responsibility, and disclaims all liability, for damages resulting from use of this information or for any errors or omissions. Specifications are subject to change without notice.