

Confined Aisle for Confined Aisle for Data Centers

Modular confined system with customized options and dimensions, easy to assemble and put into production.



The full series of rack and containment solutions Atlantic Power to build your data center with flexibility and quality.

Main features

Data center with confined hallway

Insulated by side panels, doors and roof with automatic opening panels, mounted on an adjustable structure. The cabinets are arranged in rows, forming a cold aisle or a hot aisle according to requirement.

DCIM Data Center Monitoring System

Monitoring and communication of energy, air conditioning and environmental sensors systems. Integration with access control and video surveillance. Local visualization in HMI interface with touch screen. Remote access from web, SMS, email, Modbus TCP and SNMP option.

Unified access control

Three-way access (PIN/password/fingerprint) with option for facial recognition. Central and remote management through independent software integration with the DCIM system.



Automatic opening panels

Option of automatic opening panels, with controller activated by the fire suppression system



Custom Confined Data Center, systems and options

Options in Atlantic Power energy systems:

- 3~60kVA Rack Mount UPS.
- 60~200kAV modular UPS, for rack mounting.
- 250~600kVA modular UPS, for row mounting.
- Rectifier 60~1200A/ 48 VDC.
- VRLA and/or Lithium battery bank.
- Rack-mount power distribution unit.
- Basic and/or smart PDU



Options in Atlantic Power cooling systems:

- Internal in-row cooling of 5~90kW.
- Perimeter cooling of 5~200kW.
- Free cooling option (free cooling type).



Security system options:

- Three-way access control on each door.
- Centralized management software.
- Video surveillance.



DCIM monitoring system:

- Interface (HMI) with color touch graphic screen.
- Local and remote monitoring of all confined data center environment systems and sensors.
- Monitoring of 100 temperature/humidity sensors, smoke sensors and door opening.
- Record of 100,000 events and alarms.
- Supports remote web access, email alert, SMS alert, and SNMP V2/ Modbus-TCP integration.
- Integration with third-party systems.

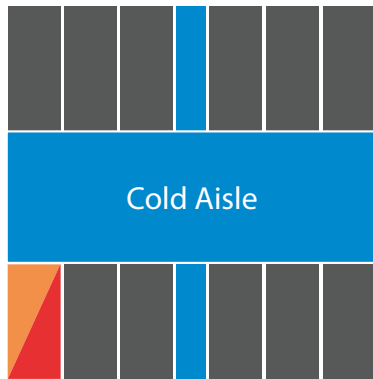


Fire System :

- Room mounted fire system automatically detects system fire status, and release the built in FM200/No-vec1230 gas to extinguish the fire.
- Early stage aspiration type fire detection system sends alarm before the fire causes any damage.

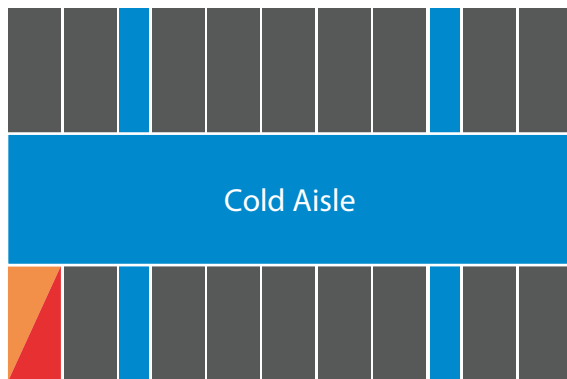


Pre-configured confined systems



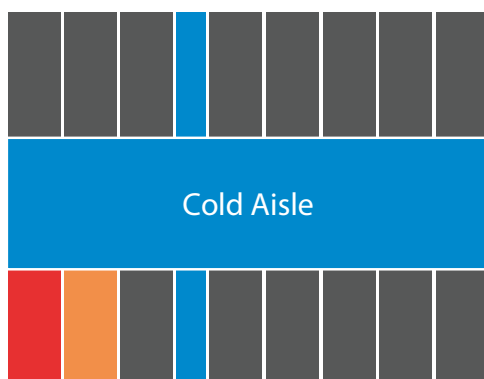
ATP-60-R12

- Gabinetes JT: 12 Unid
- Potencia: 60kW
- Aire acondicionado: 2x 65.7 kW
- UPS: 90kVA
- Redundancia: N+1



ATP-90-R18

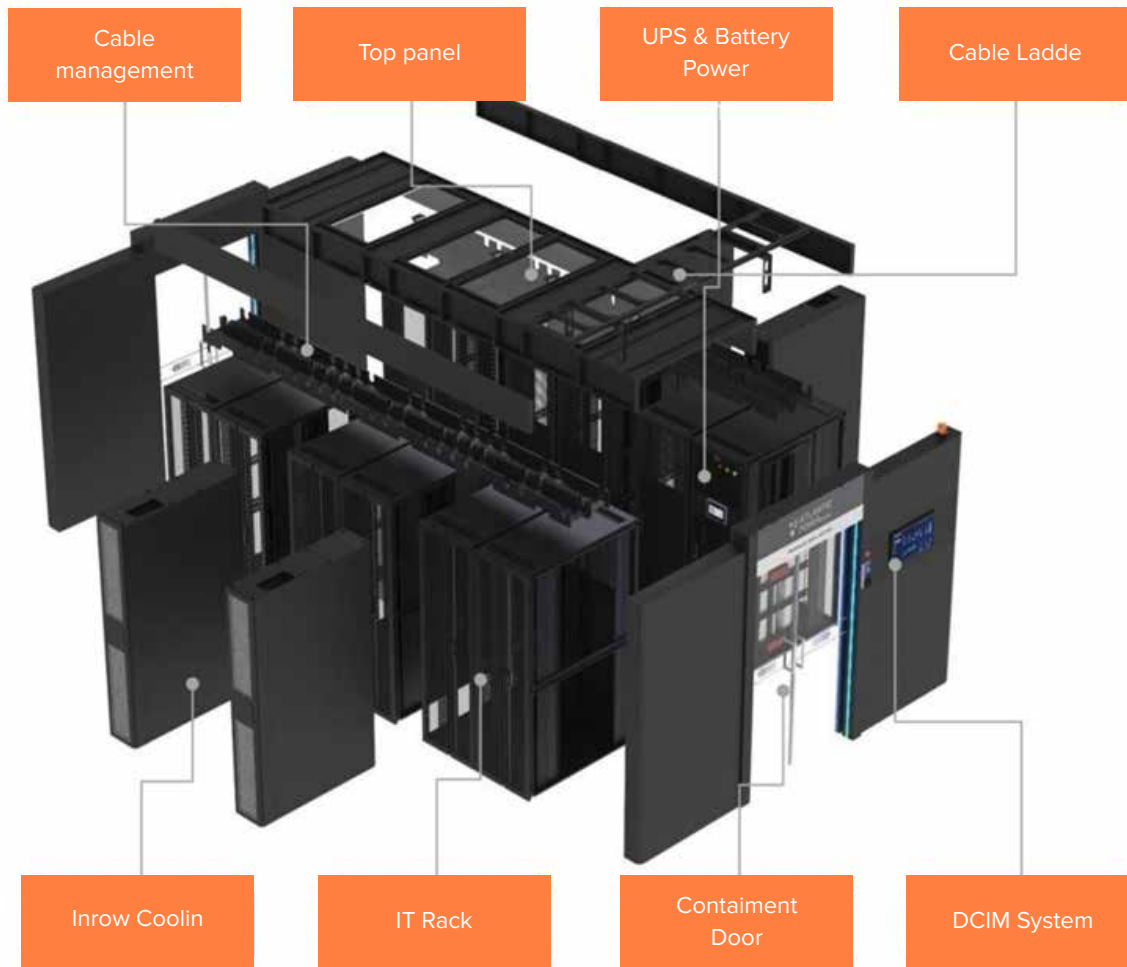
- IT Rack: 18 set
- IT Power: 90kW
- Cooling: 4 x 31.1kW
- UPS: 90kVA
- Redundancy: N+1



ATP-120-R24

- IT Rack: 24 set
- IT Power: 120kW
- Cooling: 4 x 51.2 kW
- UPS: 150kVA
- Redundancy: N+1

Main Components of the Confined Modular Data Center



Built with high resistance and quality materials

- Assembly structure, panels, roof, doors and cabinets made of cold-rolled steel sheet, with excellent strength and resistance to corrosion.
- Load capacity of the cabinets: 1800 kg.
- IP protection level of the confinement components: IP20.
- Epoxy resin paint, grade B fire resistance.
- Roof panels in cold rolled steel frame and Stalinite panels, fire resistance level grade B.
- Electrical wiring with excellent electrical conductivity and corrosion resistance, with grade B fire resistance.
- Maximum operating temperature: 105 degrees Celsius.

Technical Data: Systems with three-phase IEC power: 380~415V/3P/50~60Hz

Product Model	ATP-60-R12	ATP-90-R18	ATP-120-R24	Configured
IT Rack No.	12	18	24	Per Definition
Rack Power Density -kW/Rack	5	5	5	Per Definition
Total IT Power -kW	60	90	120	Per Definition
Redundancy	N+1	N+1	N+1	T1 ~ T4
Width -mm	3600	3600	3600	Per Definition
Depth -mm	2991	2991	6058	Per Definition
Height -mm	2000	2000	2000	Per Definition
IP Level	IPX0	IPX0	IPX0	IPX0
Input Power	380-415V/3P /50-60Hz	380-415V/3P /50-60Hz	380-415V/3P /50-60Hz	380-415V/3P /50-60Hz
Power Section				
UPS -kVA	75kVA (5*15kVA)	125kVA (5*25kVA)	150kVA (6*25kVA)	3 ~ 600kVA
UPS Mount Type	Rack-Modular	Rack-Modular	Rack-Modular	Rack/Floor
Standard UPS Battery	VRLA 15min@60kW	VRLA 15min@90kW	VRLA 15min@120kW	Lithium/VRLA
AC PDU	Smart/Basic PDU	Smart/Basic PDU	Smart/Basic PDU	Per Definition
-48VDC -A	Optional	Optional	Optional	10 – 600A
48VDC Battery	Optional	Optional	Optional	<= 4 hour
48VDC PDU	Optional	Optional	Optional	Per Definition
Cooling Section				
Cooling Type	Inrow Split DX	Inrow Split DX	Inrow Split DX	Inrow/CRAC
Mount Type	Row	Row	Row	Row/Room
Capacity-kW	2x 65.7kW	4x 31.1kW	4* 51.2kW	5 ~ 200kW
DCIM Section				
Local Display	Touch Screen	Touch Screen	Touch Screen	Touch Screen
Remote Access	Web/SMS/Email	Web/SMS/Email	Web/SMS/Email	Web/SMS/Email
Reporting Protocol	Modbus/SNMP	Modbus/SNMP	Modbus/SNMP	Modbus/SNMP
UPS Mgmt.	Yes	Yes	Yes	Yes
Cooling Mgmt.	Yes	Yes	Yes	Yes
Temperature & Humidity Sensor	Yes	Yes	Yes	Yes
Fire Sensor	Smoke	Smoke	Smoke	Smoke
Water Sensor	Yes	Yes	Yes	Yes
Door Sensor	Yes	Yes	Yes	Yes
Security Section				
Access Control	RFID/Pin/Finger	RFID/Pin/Finger	RFID/Pin/Finger	RFID/Pin/Finger
Video Surveillance	Yes	Yes	Yes	Yes
Fire Fighting Section				
Fire Extinguisher	Optional	Optional	Optional	Optional
Early Detection	Optional	Optional	Optional	Optional

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Total IT Power -kW	60	90	120	Per Definition
Redundancy	N+1	N+1	N+1	T1 ~ T4
Width -mm	3600	3600	3600	Per Definition
Depth -mm	2991	2991	6058	Per Definition
Height -mm	2000	2000	2000	Per Definition
IP Level	IPX0	IPX0	IPX0	IPX0
Input Power	208-230V/3P /50-60Hz	208-230V/3P /50-60Hz	208-230V/3P /50-60Hz	208-230V/3P /50-60Hz
Power Section				
UPS -kVA	75kVA (5*15kVA)	105kVA (7*15kVA)	150kVA (10*15kVA)	3 ~ 300kVA
UPS Mount Type	Rack-Modular	Rack-Modular	Floor-Modular	Rack/Floor
Standard UPS Battery	VRLA 15min@60kW	VRLA 15min@90kW	VRLA 15min@120kW	Lithium/VRLA
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Remote Access	Web/SMS/Email	Web/SMS/Email	Web/SMS/Email	Web/SMS/Email
Reporting Protocol	Modbus/SNMP	Modbus/SNMP	Modbus/SNMP	Modbus/SNMP
UPS Mgmt.	Yes	Yes	Yes	Yes
Cooling Mgmt.	Yes	Yes	Yes	Yes
Temperature & Humidity Sensor	Yes	Yes	Yes	Yes
Fire Sensor	Smoke	Smoke	Smoke	Smoke
Water Sensor	Yes	Yes	Yes	Yes
Door Sensor	Yes	Yes	Yes	Yes
Security Section				
Access Control	RFID/Pin/Finger	RFID/Pin/Finger	RFID/Pin/Finger	RFID/Pin/Finger
Video Surveillance	Yes	Yes	Yes	Yes
Fire Fighting Section				
Fire Extinguisher	Optional	Optional	Optional	Optional
Early Detection	Optional	Optional	Optional	Optional

Options in custom confined systems

- Made up of two rows of cabinets with a cold central aisle.
- Made up of two rows of cabinets with a hot central aisle.
- With the hallway confined between a row of cabinets and the wall.
- Adjustable structure, for cabinets of different dimensions.
- In-row air conditioning system, with or without raised floor.
- Perimeter Down-Flow air conditioning system with technical floor.
- Deployable ceiling panels or with fixed panels.
- Physical dimensions, with modular growth capacity.
- Modular UPS system for energy growth.
- With redundancy in energy and cooling.



Certifications



European directive LVD

