

iMDC Series

Intelligent Modular Data Centre Solution

The Ablerex iMDC is a all-in-one solution integrating key Data Centre equipment's including precision rack cooling, fire suppression, UPS, power management and environment monitoring system in a single lockable IT rack.

The solution feature high reliability, protection and occupies only a small footprint, meeting the data centre requirements of cost effectiveness, suitable for small and medium-sized data centre and Edge Computing application.



PERFECT FOR:



Data Centre



Bank branches



Telco Hubs



Remote Weather Stations

FEATURES



• Fast Deployment with "Plug and Play" concept

- Swift installation with modular integration concept and pre-assembled all the equipment into rack before delivery.
- Plug and play deployment prevents complicated site workmanship.



Fast Deployment

• Full Protection

- Built-in UPS to support IT equipment and cooling system.
- High security with individual locking system.



Compliance to Data Sovereignty

• Low Total cost of ownership

- Eliminate the need for a raised floor or specialized IT room environment.
- Compact and Space saving as all the equipment are integrated into a 42U IT rack.
- Requires minimal site installation because of its all-in-one package.



Cost Effectiveness

• Intelligent Environment Monitoring & Power Management System

- Built-in user friendly 10.1inch Colour LCD Touch Screen for advanced control and monitoring.
- Data logging for temperature, humidity, UPS, power usage and cooling unit.
- Remote Monitoring through BMS system via RS485 ModBus RTU or Modbus TCP/IP.



Centralized Monitoring

Intelligent Lighting System



- Intelligent lighting system with different LED light colours to alert users of the changes in the cabinet temperature. The LED light colours are user selectable.

Red LED - Alarm status



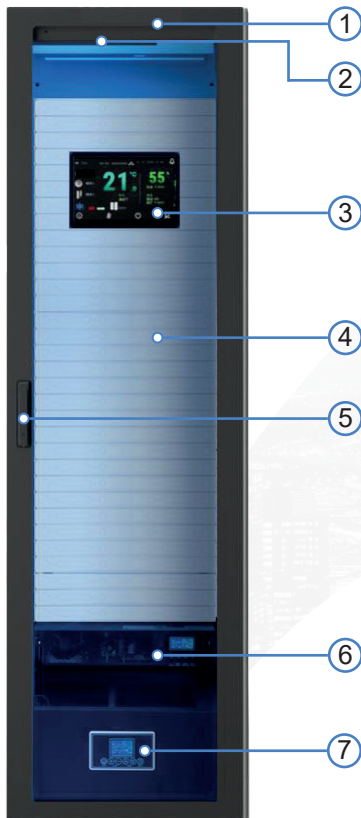
Blue LED - Pre-alert status



Green LED - Normal status



SYSTEM ARCHITECTURE



1. Emergency Ventilation

- > Automatic door opening provide additional overheating protection when smoke is detected.
- > Exhaust fans automatically turns on to ventilate the IT rack and expel the smoke.

2. Power Management Unit

- > Integrated input and output power distribution management with lightning protection.

3. 10.1" Touch Screen Display Panel

- > Integrated with intelligent environment monitoring and power management unit to manage key equipment measurables.

4. IT Rack

- > 19" 42U fully enclosed rack with Tempered Glass front door.
- > Complied to industry standard EIA-310-D
- > Withstand static load up to 1800kg.

5. High Security Locking System

- > Key lock and card access
- > Finger print and passcode (Optional)
- > Front View Camera (Optional)

6. Built in 3kVA/6kVA UPS

- > Supports both IT equipment and cooling system
- > Rack mounted UPS manual bypass for hot-swapping of UPS (Optional)

7. Precision Cooling Unit

- > High efficiency direct expansion cooling system using Brushless Direct Control (BLDC) inverter compressor for better speed control and precise temperature control.
- > Condensate drain pipe (Optional)

SPECIFICATIONS

Model	iMDC-S (Spilt Unit)	iMDC-I (Integrated Unit)	iMDC-P (Premium Unit)
Rack Size (W x D x H, mm)	600 x 1200 x 2000	600 x 1400 x 2000	800 x 1200 x 2000
Usable Space (with UPS)	31U	25U	42U (w/o Battery pack 3U)
Cooling System	Direct Expansion Air Cooled with R410A Refrigerant 4kW or 8kW		
Condenser Unit	Spilt	Integrated	Spilt
Display Panel	10.1" Colour Touch Screen		
Centralized Monitoring & Management System	Built-in dynamic environment monitoring host, temperature and humidity, power distribution / UPS / air conditioning monitoring		
UPS	3kVA or 6kVA		
Power Input	40A/1P, 220-230V		40A/1P or 63A/1P, 220V-230V
Power Frequency	50/60Hz		
PDU	16A input, 12x C13 + 4x C19, 2 Sets		
Intelligent LED lighting System	Green (Normal), Blue (Pre Alert), Red (Alarm)		
Emergency Ventilation Fans	Yes		
Emergency Door Release	Yes		
Net Weight	330kgs		420kgs

Specifications subject to change without notice

Ablerex Electronics (S) Pte Ltd

23 New Industrial Road #05-03 Solstice Business Center Singapore 539206
Tel: +65 6282 6535 Website: ablerex.com.sg Email: sales@ablerex.com.sg