



## Micro Data Centre Solutions



Micro Data Centre (MDC) is a fully integrated data centre infrastructure solution equipped with power, cooling, fire suppression, sensors, and environmental monitoring. With its integrated design, MDC occupies smaller footprint compared with the traditional design. MDC is modular starting from one IT cabinet and scalable to multiple IT cabinets. MDC suits to most room dimensions and layouts.



The scalability of MDC enables you to adopt “pay-as-you-grow” method in building your data centre (DC). As computing capacity is mostly unpredictable, MDC gives flexibility to increase the number of cabinets and precision cooling. This enables you to reduce total capex over the life cycle of the DC.

As MDC comes in modules, the installation takes lesser time than traditional method. The modules are pre-fabricated in the factory and most in-rack com-

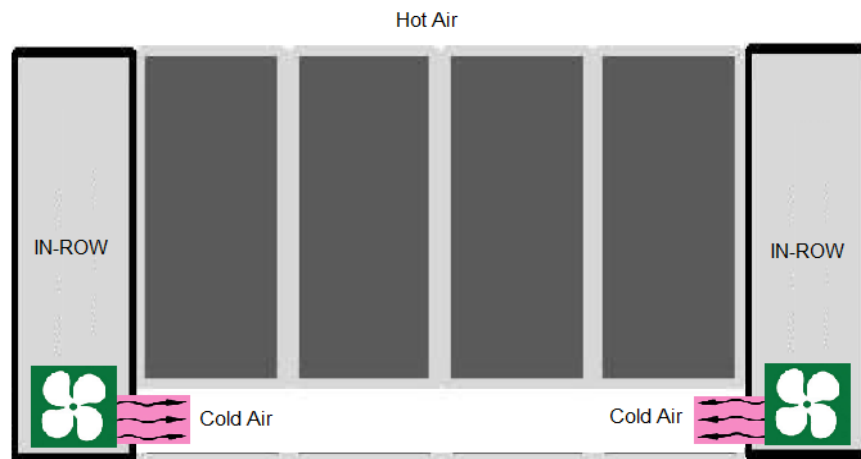
ponents have been pre-installed and tested. With minimal on-site installation, there is no more hidden costs involved in completing your DC project.

MDC power & cooling can be designed with N+1 redundancy and concurrent maintainability to match typical Tier-III DC. Below pic is the MDC for six IT cabinets and three In-Row cooling units. Datwyler can design the cooling capacity in such a way that if one of the cooling units is not working or needs maintenance service, the other two cooling units provide continuous cooling to all IT cabinets. It is possible to do a similar arrangement for the power.



The row cooling system in Datwyler’s MDC separates cold aisle and hot aisle in the IT cabinets. The cooling is in closed-loop within MDC. It does not require containment and/or raised-floor.

The cooling unit blows the cold air laterally towards the IT cabinets, instead of blowing to the front side and occupying larger space. That way the closed-aisle system provides higher cooling efficiency and up to 30% annual OPEX saving.



Our data centre team can provide layout drawings and single-line diagrams to suit your requirements in Telecommunications, Electrical, Architectural, and Mechanical (TEAM) and to meet any targeted Tier or Rated and tailored to any size of your data centre.

With 101 years legacy of Datwyler in producing future-proof and the finest quality of products, we are ready to share the best practices from our global clients on how to design and build your DC.

Please contact our local representative who will further discuss your requirements.

We can equip your MDC with accessories installed inside the rack that includes the following devices:

1. Either basic or intelligent rack PDU with the capability to manage individual power outlets
2. Rack Access Control
3. Fire Detection and Novec 1230 In-Rack Fire Suppression
4. Sensors: temperature and/or humidity, water leakage, smoke, door
5. LED lighting, beacon
6. Environmental Monitoring System (EMS) with alert system through email, SMS, SNMP trap; EMS can monitor UPS, generator, chiller, fire panels and other equipment through RS485 connections
7. KVM switch & rackmount monitor
8. Patch panels, modules, and cords (copper or fibre optics)

