



MICRO AND MINI DATA CENTRES

CUTTING **EDGE** SOLUTIONS FOR YOUR
DECENTRALISED DC ARCHITECTURE

2020



DATWYLER

EMBRACE DIGITISATION

Our world is becoming increasingly digital, interlinked and intelligent. IoT, automation, 5G, robotics and artificial intelligence are opening up many new applications and business models.

To capitalise on the opportunities which come with digitalisation, your organisation must rely on a smart and strategic IT infrastructure.

The amount of data produced will continue to grow exponentially. These data volumes have to be processed

close to their source (edge computing) due to, among other factors, efficiency and latency. A lot of mini and micro data centres are needed to do this.

We are a global player that helps organisations to stay at the forefront of progress, elevating their core business. While you focus on developing your business we take care of your IT infrastructure – with one-stop service solutions tailored to your needs.

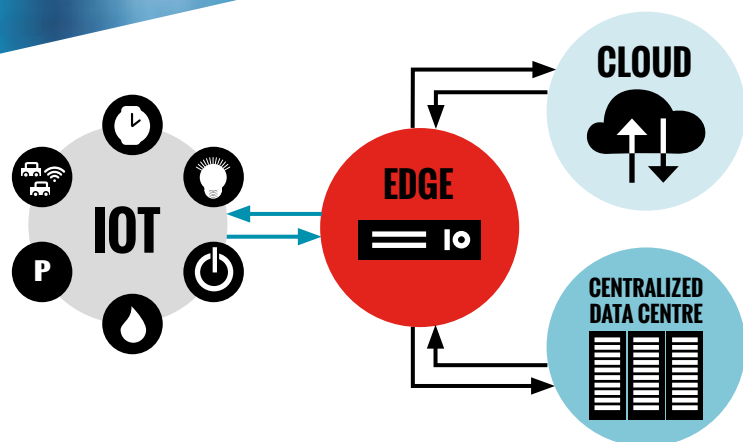


"In 2017 about 10% of data were created and processed outside centralised data centre and cloud. By 2022 they predict this figure will reach 50%."

--- GARTNER

WHY EDGE DATA CENTRES?

- Low latency
- Data processing just in time
- Data aggregation
- Network independent local operation
- Protection of critical data



CHARACTERISTICS OF AN EDGE DATA CENTRE

- . Located in a strategic site close to the users and devices
- . Supports distributed data processing
- . Complete equipment in just one cabinet or in multiple racks
- . Reliable self-contained system
- . Provides optimal physical & cyber security
- . Offers high-performance internet connection
- . Remote monitoring of infrastructure
- . Can work independently from the Cloud



Datwyler Micro Data Centre
with in-rack cooling

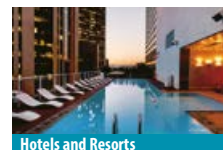


Datwyler Mini Data Centre
up to 8 racks, with in-row cooling

TYPICAL INDUSTRY APPLICATIONS

A rapidly maturing market:

- . Retail
- . Entertainment
- . Healthcare
- . Banking
- . Education
- . Logistics
- . Government
- . many others



**DATWYLER
MICRO & MINI
DATA CENTRES
MAKE YOUR
LIFE EASIER**

Ease of use

- . Pre-configured for various operational scenarios, therefore fast ordering
- . "Plug-and-play" solution
- . Rapid deployment
- . Touch-screen and user-friendly software

High reliability

- . Quality of each MDC is tested prior to delivery
- . The environment and security monitoring system protects the equipment
- . All data is managed and stored redundantly on local storage media as well as in the Cloud
- . Can be monitored anywhere and anytime
- . Proactive alarm notification via email and/or SMS

Low TCO (Total Cost of Ownership)

- . Real-time monitoring of the UPS and cooling unit helps to save energy
- . Integrated cooling ensures high power usage effectiveness (PUE)
- . Small footprint and fast deployment
- . Constant monitoring reduces downtime caused by failure

Fast maintenance

- . Key components are of modular design
- . UPS with maintenance bypass
- . Remote management of all the equipment in the rack(s) allows authorised personnel to be alerted so that faults can be rectified before they have serious consequences

DATWYLER MICRO DATA CENTRE

In a compact 42U rack Datwyler's Micro Data Centre contains a fully preassembled plug-and-play IT infrastructure solution; including a power distribution unit, UPS, cooling system, fire suppression system (optional), air gap sealing and environment monitoring system. It can be deployed within a few hours. The infrastructure can be customised according to customer needs and requirements.

Datwyler's Micro Data Centre is designed for applications such as edge computing, computing node in remote and branch offices, floor distributor (FD) and "smart facilities" deploying IoT devices and running Artificial Intelligence (AI), Augmented Reality (AR), Virtual Reality (VR) and automation.

Equipment Rack

42U, with side cable management tray

Fire Suppression

Rack mounted (optional)

Power Distribution

Pre-wired for rapid employment, with fault isolation, provides surge protection

Uninterruptible Power Supply (UPS)

Rack mounted, online, delivers continuous protection

Backup Batteries

Durable and scalable, provide autonomy during power failures and disruptions

Emergency Ventilation Fans

Extract hot air in case of cooling failure (optional)

Acoustic & Visual Alarm

Automated, ensures best visibility

Environment Monitoring System

Real-time status reporting

Smart Access Control

Key, card, keypad or biometric

Closed doors

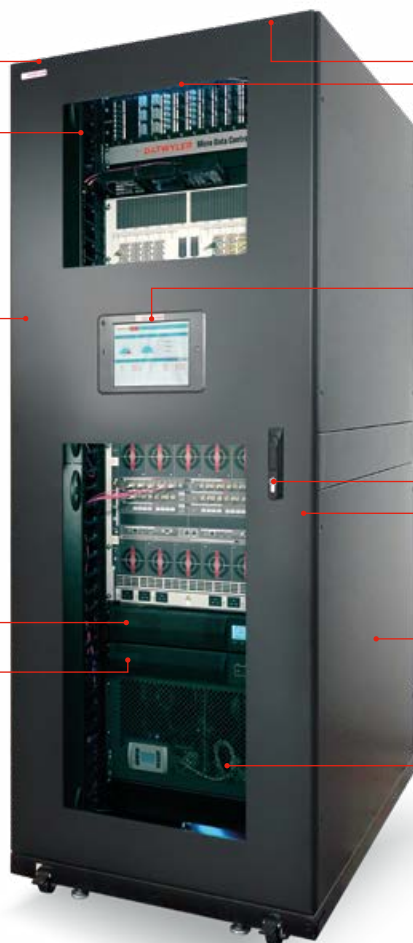
for high cooling efficiency and noise reduction

Intelligent PDU

Equipped with intelligent power management

In-Rack Cooling System

Ensures optimum environment



| SPECIFICATION | MDC 100 | MDC 200 | MDC 300 |
|----------------------------|---|---|---|
| Height Units | 42 | 42 | 42 |
| Available space (U) | 42 | 38 | 30 |
| Dimensions (H x W x D) | 2200 x 800 x 800 mm | 2200 x 800 x 1100 mm | 2200 x 800 x 1100 mm |
| Doors | Closed (glass front and metal back) | Perforated | Closed (glass front and metal back) |
| Access control | Electronic | Electronic | Electronic |
| UPS capacity | - | up to 3 kVA | up to 3 kVA |
| Back-up time | - | 15/30 min @ 50% charge | 15/30 min @ 50% charge |
| Cooling capacity | - | - | 3.6 kW |
| User interface | Touch screen, web browser | Touch screen, web browser | Touch screen, web browser |
| Monitoring | Temperature and humidity, smoke, iPDU, door status | Temperature and humidity, smoke, iPDU, door status, UPS and batteries, alarm status | Temperature and humidity, smoke, iPDU, door status, UPS and batteries, alarm status, cooling, leakage |
| Alarm | Sound/light alarm, email notification | Sound/light alarm, email notification | Sound/light alarm, email notification |
| Options | Camera, cabling, ventilation fans, SMS alarm notification, fire extinction system | Camera, cabling, ventilation fans, SMS alarm notification | Camera, cabling, ventilation fans, SMS alarm notification, fire extinction system |

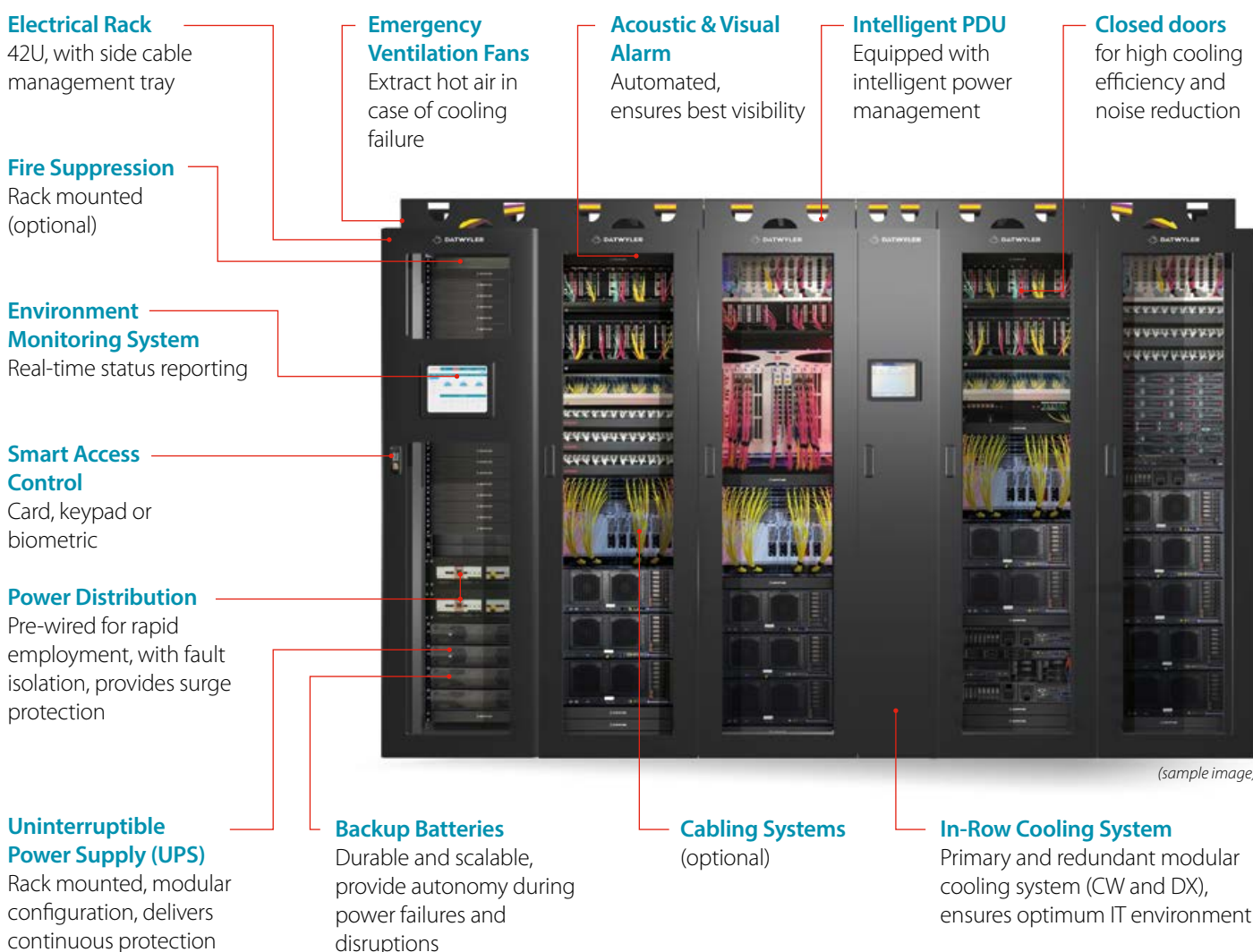
VERSIONS

The Datwyler Micro Data Centre is tailor-made and customised solution to fulfil the customers' specific needs and requirements.

DATWYLER MINI DATA CENTRE

Datwyler's modular Mini Data Centre is a state-of-the-art, pre-assembled plug-and-play IT infrastructure solution. It consists of a 42U rack with integrated power distribution, uninterruptible power supply (UPS), fire suppression system (optional), air gap sealing and environment monitoring system, as well as additional IT equipment racks and an in-row cooling system. It can be deployed within a few hours. It provides multiple ways to configure power and cooling redundancy to meet the current demand while being ready for future technology migration at low cost and with less disruption.

Datwyler's modular Mini Data Centre is designed for applications such as edge computing, small data centre, building distributor (BD), floor distributor (FD) and "smart facilities" deploying IoT devices and running AI, AR, VR and automation.



SPECIFICATION

| | | | |
|---------------------------|--------------------------------------|-------------------|---|
| IT load | up to 72 kW | Remote management | Cooling system, UPS, access control, iPDU, environment setpoint and alarm notification |
| UPS capacity | up to 80 kVA | Remote monitoring | Cooling system, UPS, access control, iPDU, power usage effectiveness (PUE), IT load, temperature, humidity and alarm status |
| IT racks | up to 8 (static load 1300 kg / rack) | | |
| Backup time | up to 15 mins. | | |
| Sensible cooling capacity | up to 75.3 kW (CW or DX) | | |
| Dimensions (W x D x H) | (1500 - 6900) x 1400 x 2000 mm | | |
| Mounting | Direct on floor or on raised floor | | |
| Cable entry | Top / bottom access | User interface | 10.4" touch screen and remote web interface |
| Emergency ventilation | Top of the rack and front door | Alarm | Sound/light alarm, email notification |

VERSIONS

The Datwyler Mini Data Centre is tailor-made and customised solution to fulfil the customers' specific needs and requirements.

DATWYLER DCIM

FOR MINI AND MICRO DC

The Datwyler Data Centre Infrastructure Management solution features an innovative approach towards IT infrastructure management, taking into consideration the latest technological advancement in IoT, AI, IP communication, and other technologies. The platform allows the DCIM to integrate with a wide range of systems supporting the IT infrastructure. It provides real-time monitoring of environment conditions, access control and energy consumption, activates the alarm in case of an emergency and collects data for planning of preventative maintenance. It comes with a friendly and easy to use graphical user interface that simplifies the complexity and sophistication of the systems running behind.

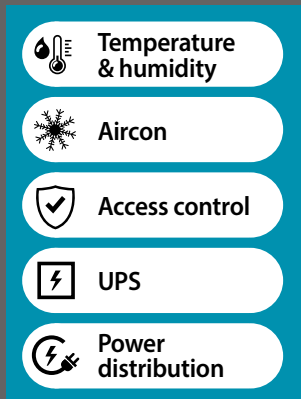
SYSTEM ARCHITECTURE

Real-time monitoring

Openness & flexibility

Alarm notification

Reports & graphs



Alarm

Email alert

SMS (optional)

HMI TOUCH SCREEN FEATURES

- . 10.4" flat multi-contact touch screen
- . Built-in AI/DI/RS232/RS485 interfaces
- . Collects, processes, displays and uploads data
- . Reports temperature, energy consumption and controls cooling units
- . Compatible with a variety of environmental sensors and infrastructure equipment
- . USB interface for 3G wireless or WIFI support

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