MICRO AND MINI DATA CENTRES

CUTTING EDGE SOLUTIONS FOR YOUR DECENTRALISED DC ARCHITECTURE

2023

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.

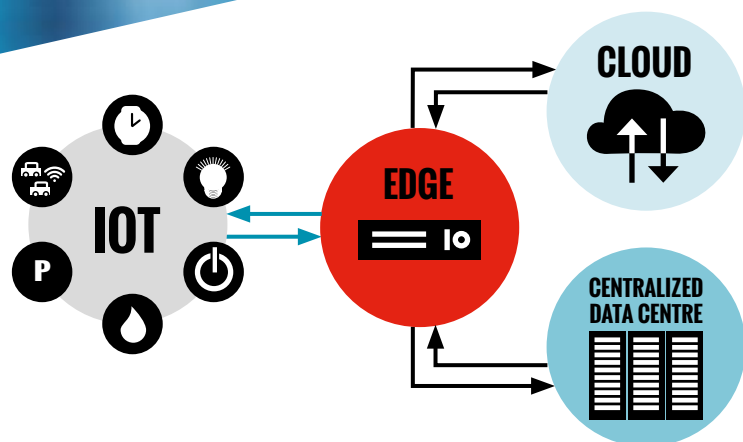The amount of data produced will continue to grow exponentially. These data volumes have to be processed close to their source (edge computing) due to, among other factors, efficiency and latency. A lot of mini and micro data centres are needed to do this.

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.

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

Data Centres

Office Buildings

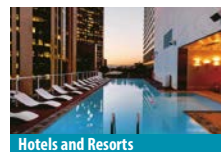Government Buildings

Shopping Malls

Event Arenas

Transport Hubs

Manufacturing

Hotels and Resorts

Education

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

Datwyler Micro Data Centre is a compact, preassembled, plug-and-play, quick to deploy, fully monitored and managed, low maintenance onsite IT infrastructure solution. It is a standalone data centre that integrates the elements of cooling, power supply, monitoring and security into a single solution.

Unlike maintaining onsite data centres and server rooms which need extensive maintenance, planning, cost and space, the Datwyler Micro Data Centre is a compact solution that enables businesses to run applications on-premise or at the "Edge". The infrastructure can be customised according to customer needs and requirements.

Equipment Rack
43U, with side cable management tray

Fire Suppression
Rack mounted (optional)

Power Distribution
prewired for rapid deployment, with overvoltage protection

Uninterruptible Power Supply (UPS)
Rack mounted, online double conversion for continuous power

Backup Batteries
Durable and scalable, provide autonomy during power failures and disruptions

Emergency Ventilation Fans
Extract hot air in case of cooling failure (optional)

Lighting & Visual Alarm
Automated, ensures best user alerts

Rack Monitoring System DIMS
Real-time status reporting

Smart Access Control
Key, card, keypad or biometric (optional)

Doors
Ensures effective noise reduction, optimal insulation and high cooling efficiency

Intelligent PDU
Equipped with intelligent power management

In-Rack Cooling System
Precise temperature control ensuring optimal environmental conditions

(product may differ from illustration)

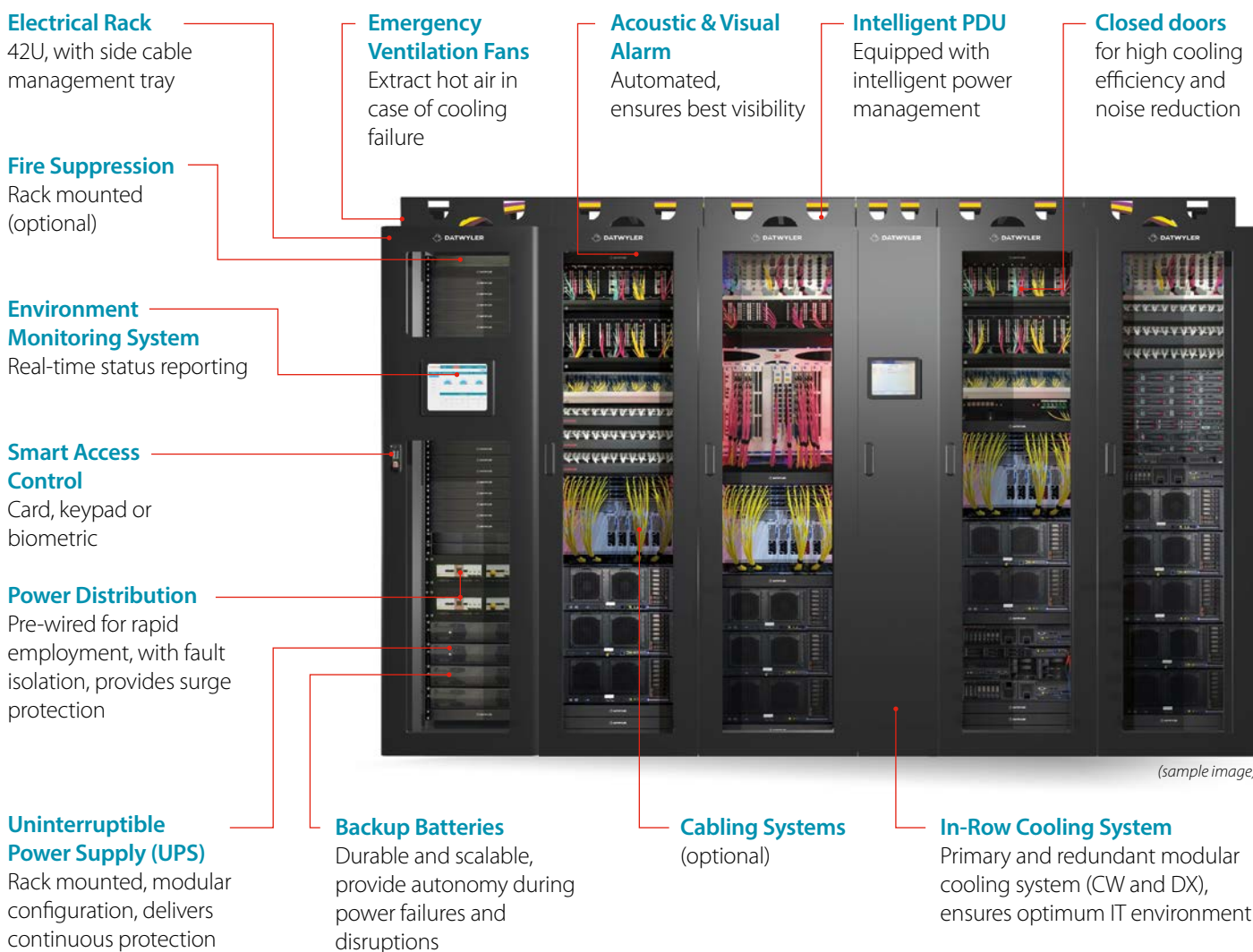| SPECIFICATION	MDC 100	MDC 200	MDC 300
Height Units	43	43	43
Available space (U)	**42**	**39**	**33**
Dimensions (H x W x D)	2134 x 798 x 809 mm	2134 x 798 x 1209 mm	2134 x 798 x 1209 mm
Doors	Closed (glass front and metal back)	Perforated	Closed (glass front and metal back)
Access control	EK333	EK333	EK333
UPS capacity	-	up to 3 kVA	up to 3 kVA
Back-up time	-	13 / 28 min @ 100% / 50% load	13 / 28 min @ 100% / 50% load
Cooling capacity	-	-	3.6 kW
User interface	Touch screen, web browser	Web browser	Touch screen, web browser
Monitoring	Temperature, humidity, door status	Temperature, humidity, door status	Temperature, humidity, smoke, door status, leakage, vibration
Alarm	Sound/light alarm, email notification	Sound/light alarm, email/SMS notification	Sound/light alarm, email/SMS notification
Options	Cabling and cable management	Cabling and cable management, scalable backup batteries	Cabling and cable management, ventilation fans, fire extinction system, scalable backup batteries

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.

Electrical Rack
42U, with side cable management tray

Fire Suppression
Rack mounted (optional)

Environment Monitoring System
Real-time status reporting

Smart Access Control
Card, keypad or biometric

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

Emergency Ventilation Fans
Extract hot air in case of cooling failure

Acoustic & Visual Alarm
Automated, ensures best visibility

Intelligent PDU
Equipped with intelligent power management

Closed doors
for high cooling efficiency and noise reduction

(sample image)

Uninterruptible Power Supply (UPS)
Rack mounted, modular configuration, delivers continuous protection

Backup Batteries
Durable and scalable, provide autonomy during power failures and disruptions

Cabling Systems
(optional)

In-Row Cooling System
Primary and redundant modular cooling system (CW and DX), ensures optimum IT environment

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		
IT racks	up to 8 (static load 1300 kg / rack)	Remote monitoring	Cooling system, UPS, access control, iPDU, environmental monitoring system
Backup time	up to 15 mins.		
Sensible cooling capacity	up to 75.3 kW (CW or DX)		
Dimensions (W x D x H)	800 x 1200 x 2200 mm		
Mounting	Direct on floor or on raised floor	User interface	Remote web interface
Cable entry	Top / bottom access	Alarm	Sound/light alarm, email notification
Emergency ventilation	Top of the rack and front door		

VERSIONS

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

DATWYLER EMS
FOR MINI AND MICRO DATA CENTRE

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.
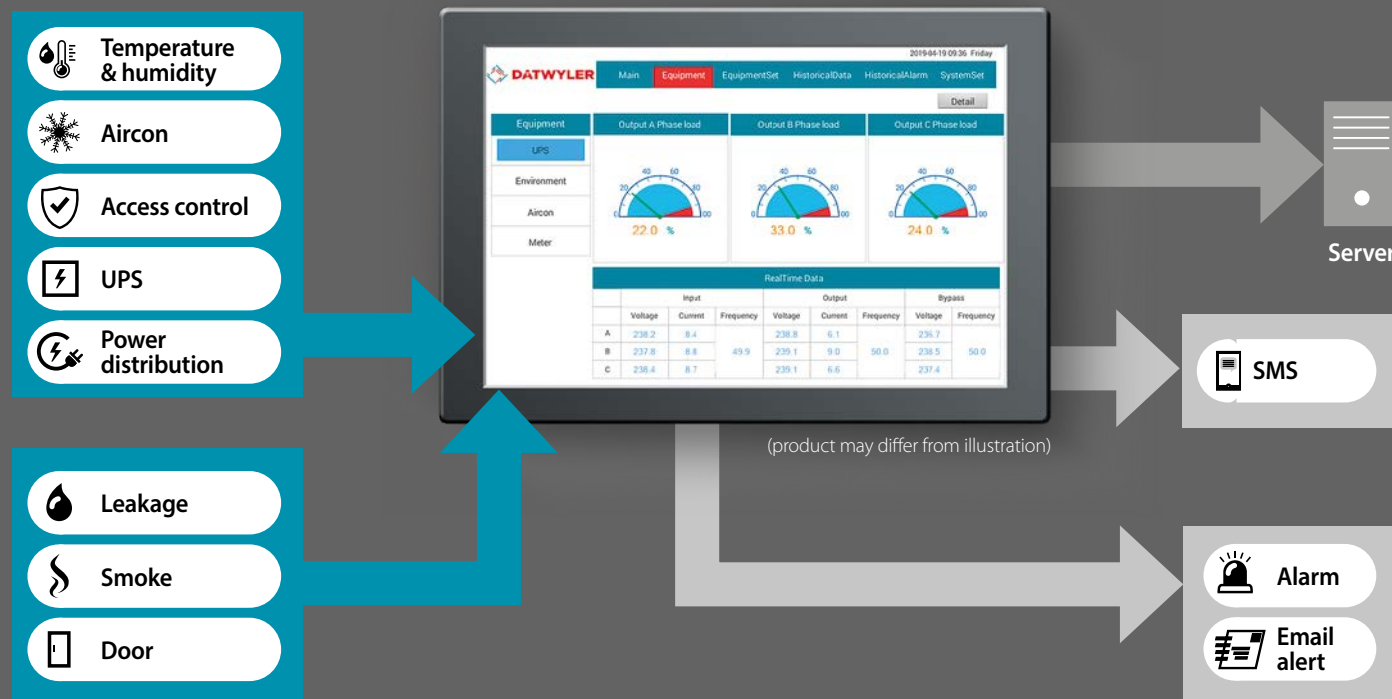
SYSTEM ARCHITECTURE

Real-time monitoring

Openness & flexibility

Alarm notification

Reports & graphs

(product may differ from illustration)

- Temperature & humidity
- Aircon
- Access control
- UPS
- Power distribution

- Leakage
- Smoke
- Door

Server

SMS

Alarm

Email alert

DIMS FEATURES

- Multilingual Web GUI with integrated logic
- Autosensing ports for the automatic detection of sensors
- User access management
- Integrated interfaces: Ethernet, USB, CAN, analog & digital
- SNMP-compatible
- Provides notifications and alerts such as e-mail, SMS and SNMP traps
- Extensive range of sensors for environmental monitoring, security control and power monitoring
- USB interface for video camera
- SD card slot for optional SD card (max. 64 GB)
- SIM card slot for optional LTE modem
- Alarms for maintenance and critical events
- Graphical representation of environmental data

ITinfra.datwyler.com

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