



# MICRO AND MINI DATA CENTRES

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



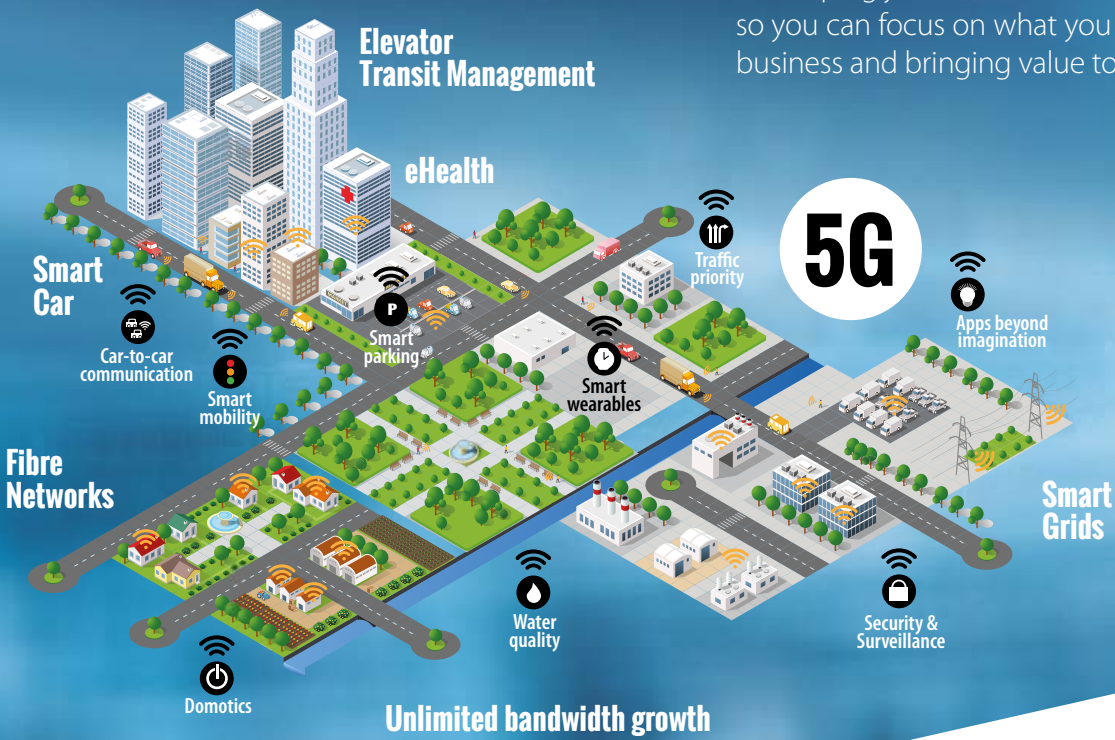
**DATWYLER**

# DATWYLER

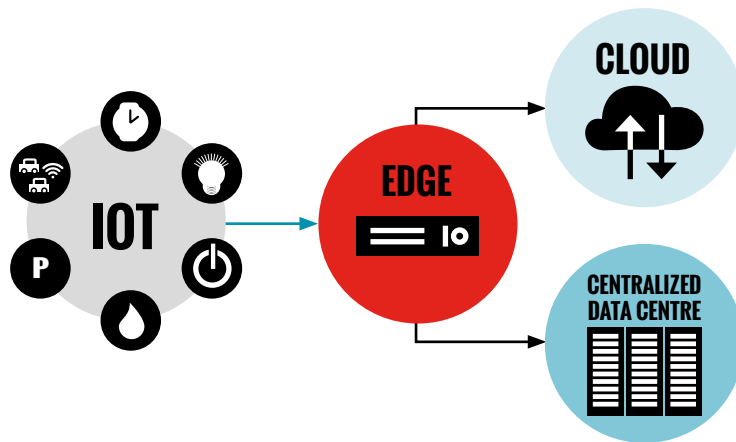
The world has become highly complex, globally connected and competitive. The amount of data required, produced and processed increases exponentially. To harness the opportunities of digitalization, organizations must rely on a smart and strategic IT infrastructure.

We are a global player that helps organizations stay at the forefront of progress, elevating their core business with a state-of-the-art IT infrastructure. Built on the best of two worlds: the top quality of a certified Swiss brand and the leading expertise of an internationally present team.

We bring a one-stop service to your doorstep, giving you direct access to the latest in technology and developing your infrastructure in line with your needs so you can focus on what you do best: growing your business and bringing value to people's lives.



## WHY "EDGE" DATA CENTRES?



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

--- GARTNER

# DC ARCHITECTURE MOVING TO EDGE

## IMPERATIVES IN EDGE DATA CENTRE

- Reliable, self-contained system
- Robust security
- Data analytics
- Remote monitoring
- Low latency
- High speed



## DATWYLER OFFERS IN EDGE DATA CENTRE

- Micro and Mini Data Centre solutions
- DCIM
- Racks, access control
- UPS, RPS
- Cooling, fire suppression
- Energy distribution
- FO, FTTH, GPON, POL
- Cabling up to 100 Gbps

## CHARACTERISTICS OF AN EDGE DC

- Close proximity to the data source
- Supports distributed data processing
- Includes data from IoT devices
- Offers high-performance internet connection
- Equipment can be in just one cabinet or in multiple racks
- Located in a strategic site close to the users and devices
- Supports any network protocols and one-hop connections, wirelessly and/or using copper or fibre optic cables
- Provides optimal physical & cyber security
- Tier level is not lower than cloud DC and centralized DC



**Datwyler Micro Data Centre**  
with in-rack cooling or side cooling



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

## DATWYLER MICRO AND MINI DATA CENTRES: Cutting edge solutions for your decentralised DC architecture

### TYPICAL INDUSTRY APPLICATIONS

#### A rapidly maturing market:

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



#### DATWYLER MICRO & MINI DATA CENTRES: DELIVERING VALUES

#### Ease of use

- . Pre-configured for various operational scenarios, therefore fast ordering
- . Can be installed as a “plug-and-play” system by any IT technician
- . 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 via the cloud
- . Proactive alarm notification via app, email and/or SMS

#### Low TCO

- . Real-time monitoring of the UPS and cooling unit help to save energy
- . Integrated cooling ensures high power usage effectiveness (PUE)
- . Small footprint and fast deployment

#### Fast maintenance

- . Key components are of modular design
- . UPS has a 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
- . Software upgrades can be downloaded from the cloud
- . Most of the environmental sensors support toolless magnetic installation

# 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, air gap sealing and environment monitoring system, which 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 no cost and less disruption.

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 AI, AR, VR and automation.

SPECIFICATIONS	with in-rack cooling	with side cooling	with side cooling
IT load	up to 2.7 kW	up to 5.4 kW	up to 9 kW
UPS capacity	up to 3 kVA	up to 6 kVA	up to 10 kVA
Available space	24 U to 27U	27U to 31U	24U to 28U
Backup time	10 to 20 mins	8 to 16 mins.	11 to 15 mins.
Sensible cooling capacity*	up to 3.8 kW	up to 7.5 kW	up to 12.5 kW
Input voltage	220/230/240 VAC   50/60 Hz   1Ph+N+PE	220/230/240 VAC   50/60 Hz   1Ph+N+PE	380/400/415 VAC   50 Hz   3Ph+N+PE**
Dimensions (W x D x H)	(600-800) x 1200 x 2000 mm	(900-1100) x 1400 x 2000 mm	
Reliability	Tier I	Tier I, Tier II, Tier III	
Mounting	Direct on floor or on raised floor		
Cable entry	Top / bottom access		
Emergency ventilation	Top of the rack and front door		
Fire suppression	FM200-J, rack mounted (1U)		
Remote management	Cooling system, UPS, access control, iPDU, environment setpoint and alarm notification		
Remote monitoring	Cooling system, UPS, power usage effectiveness (PUE), iPDU, IT load, access control, temperature, humidity and alarm status		
User interface	10.4" touch screen and remote web interface		
Alarm	Sound and light alarm with SMS notification		

## VERSIONS

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

\* Provision of outdoor cooling unit is optional  
 \*\* 60 Hz 10 kVA capacity is available in single phase only

# 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, air gap sealing and environment monitoring system, and additional IT equipment racks as well as 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 no 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

**Emergency Ventilation Fans**  
Extract hot air in case of cooling failure

**Lighting & Visual Alarm**  
Automated, ensures best visibility

**Intelligent PDU**  
equipped with intelligent power management

**Double Glass**  
for high cooling efficiency and noise reduction

**FM200 Fire Suppression**  
Rack mounted

**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

**Uninterruptible Power Supply**  
Rack mounted, modular configuration, delivers continuous protection

**Backup Batteries**  
Durable and scalable, provides autonomy during power failures and disruptions

**Dual Power Input**  
Pre-equipped with rack mounted Automatic Transfer Switch (ATS)

**In-Row Cooling System**  
Primary & redundant modular cooling system (CW & DX), equipped with humidifier, ensures optimum IT environment

SPECIFICATIONS	
IT load	up to 72 kW
UPS capacity	up to 80 kVA
IT racks	up to 8 (static load 1300 kg / rack)
Backup time	8 to 15 mins.
Sensible cooling capacity	up to 75.3 kW (CW or DX)
Input voltage	380~415 VAC   50/60 Hz   3Ph+N+PE*
Dimensions (W x D x H)	(1500 - 6900) x 1400 x 2000 mm
Reliability	Tier I, Tier II and Tier III
Mounting	Direct on floor or on raised floor
Cable entry	Top / bottom access
Emergency ventilation	Top of the rack and front door
Fire suppression	FM200-J, rack mounted (1U)
Remote management	Cooling system, UPS, access control, iPDU, environment setpoint and alarm notification
Remote monitoring	Cooling system, UPS, power usage effectiveness (PUE), iPDU, IT load, access control, temperature, humidity and alarm status
User interface	10.4" touch screen and remote web interface
Alarm	Sound and light alarm with SMS notification
VERSIONS	
The Datwyler Mini Data Centre is tailor-made and customized solution to fulfil the customers' specific needs and requirements.	

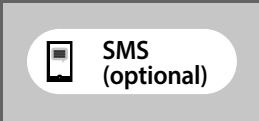
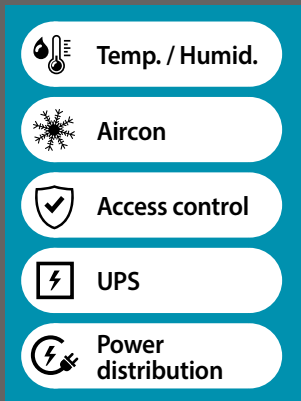
\* 60 Hz 10 kVA capacity is available in single phase only

# 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



## HMI TOUCH SCREEN FEATURES

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



# DATWYLER

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