MICRO AND MINI DATA CENTRES

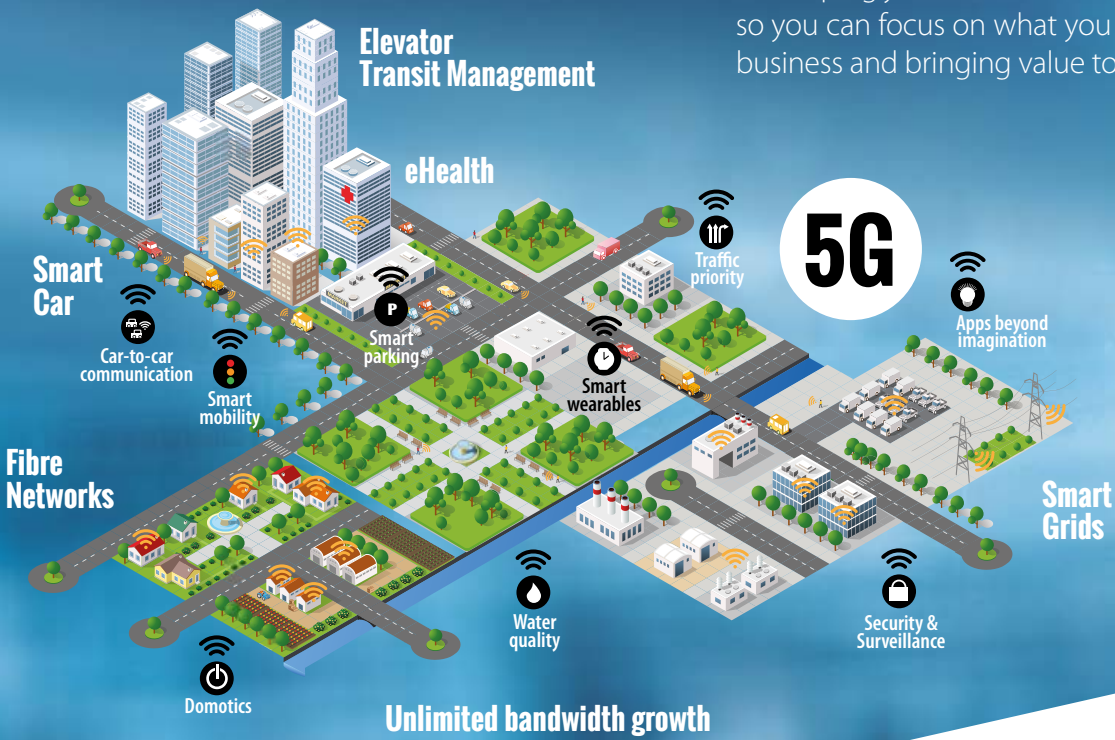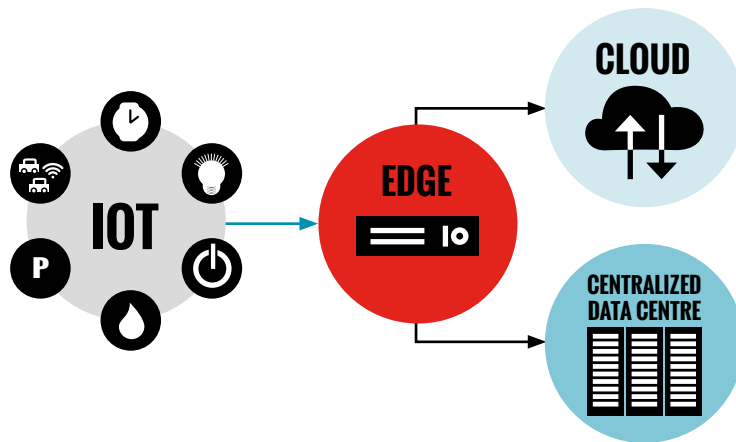CUTTING EDGE SOLUTIONS FOR YOUR DECENTRALISED DC ARCHITECTURE

DÄTWYLER

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.

Elevator Transit Management

eHealth

Traffic priority

5G

Apps beyond imagination

Smart Car

Car-to-car communication

Smart parking

Smart mobility

Smart wearables

Fibre Networks

Smart Grids

Water quality

Security & Surveillance

Domotics

Unlimited bandwidth growth

WHY "EDGE" DATA CENTRES?

IOT

EDGE

CLOUD

CENTRALIZED DATA CENTRE

"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
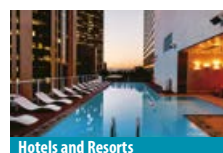with in-rack cooling or side cooling

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

Data Centres

Office Buildings

Government Buildings

Shopping Malls

Event Arenas

Transport Hubs

Manufacturing

Hotels and Resorts

Education

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

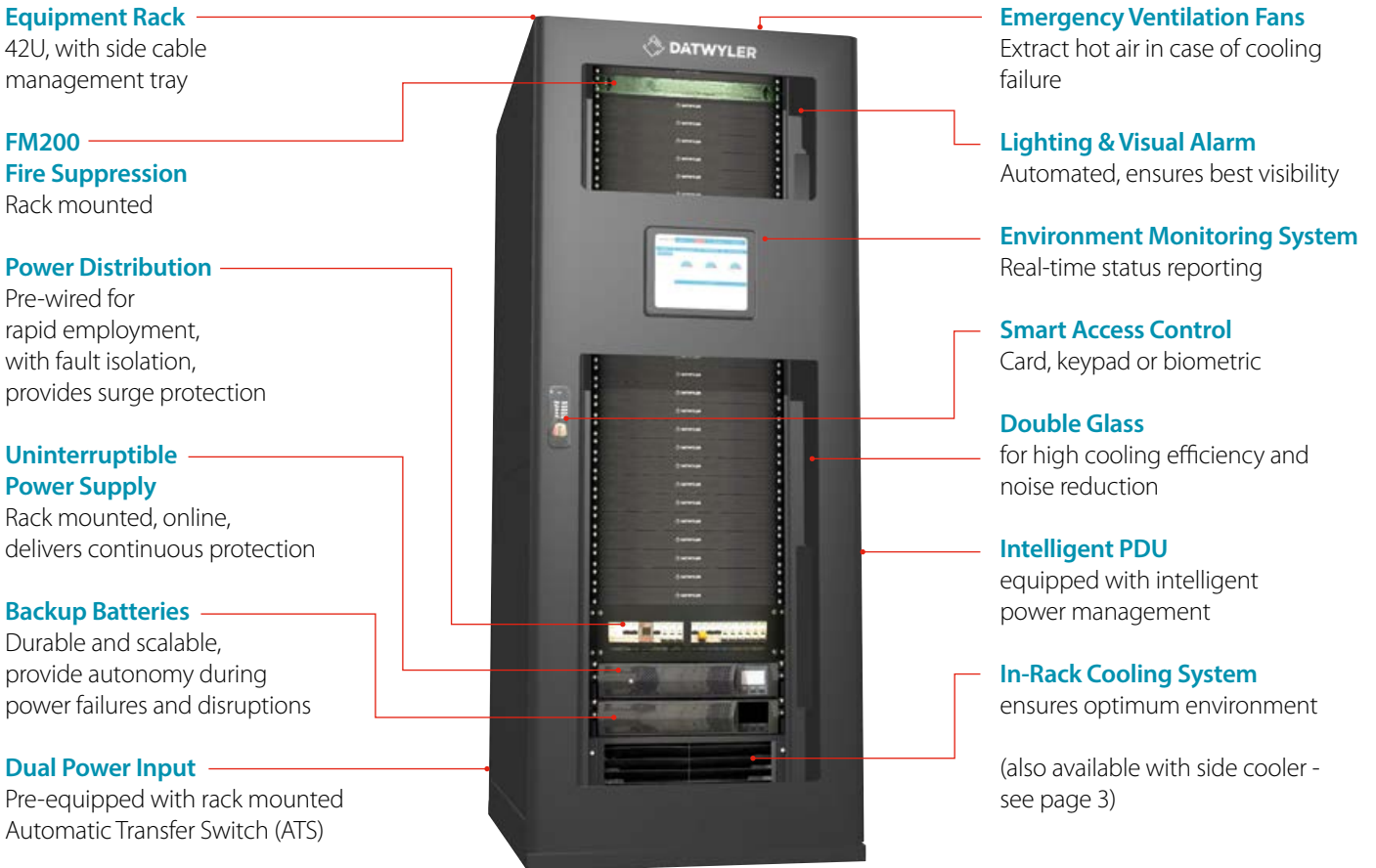## Fast maintenance
. Key components are of modular design
. UPS has a maintenance bypass
. Remote management of all the equipment in the rack(s) allows
  authorised personnel to be alerted so that faults can be rectified
  before they have serious consequences
. Software upgrades can be downloaded from 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.

Equipment Rack
42U, with side cable management tray

FM200
Fire Suppression
Rack mounted

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

Uninterruptible
Power Supply
Rack mounted, online,
delivers continuous protection

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

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

Emergency Ventilation Fans
Extract hot air in case of cooling failure

Lighting & Visual Alarm
Automated, ensures best visibility

Environment Monitoring System
Real-time status reporting

Smart Access Control
Card, keypad or biometric

Double Glass
for high cooling efficiency and noise reduction

Intelligent PDU
equipped with intelligent power management

In-Rack Cooling System
ensures optimum environment

(also available with side cooler - see page 3)

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

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

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

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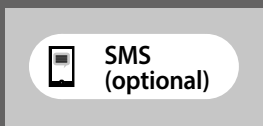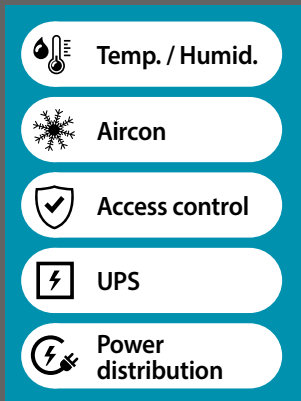
* 60 Hz 10 kVA capacity is available in single phase only

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

Real-time monitoring

Openness & flexibility

Alarm notification

Reports & graphs

- Temp. / Humid.
- Aircon
- Access control
- UPS
- Power distribution

- Leakage
- Smoke
- Door

- Alarm
- Fan

- SMS (optional)

Server

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

SWITZERLAND

Dätwyler Cabling Solutions AG
Gotthardstrasse 31
6460 Altdorf
T +41 41 875-1268
F +41 41 875-1986
info.cabling.ch@datwyler.com
www.cabling.datwyler.com

GERMANY

Dätwyler Cables GmbH
Auf der Roos 4-12
65795 Hattersheim
T +49 6190 8880-0
F +49 6190 8880-80
info.cabling.de@datwyler.com
www.cabling.datwyler.com

Dätwyler Cables GmbH
Lilienthalstraße 17
85399 Hallbergmoos
T +49 811 998633-0
F +49 811 998633-30
info.cabling.de@datwyler.com
www.cabling.datwyler.com

AUSTRIA

Dätwyler Cables GmbH
Office Austria
Liebermannstraße A02 403
2345 Brunn am Gebirge
T +43 1 8101641-0
F +43 1 8101641-35
info.cabling.at@datwyler.com
www.cabling.datwyler.com

ITALY

Datwyler Cabling Solutions S.r.l.
Via dei Campi della Rienza, 30
39031 Brunico (BZ)
T +39 031 928277
info.cabling.it@datwyler.com
www.cabling.datwyler.com

CZECH REPUBLIC

Datwyler Cabling Solutions s.r.o.
Ústecká 840/33
405 02 Děčín
T +420 417 580110
F +420 417 580139
info.cabling.cz@datwyler.com
www.cabling.datwyler.com

CHINA

Datwyler (Suzhou)
Cabling Solutions Co., Ltd.
No. 218, East Beijing Road
Taicang Economic Development Zone
Jiangsu Province, 215413
T +86 512 3306-8066
F +86 512 3306-8049
info.cabling.cn@datwyler.com
www.cabling.datwyler.cn

SINGAPORE

Datwyler (Thelma)
Cables+Systems Pte Ltd
30 Toh Guan Road #01-01A
608840 Singapore
T +65 68631166
F +65 68978885
info.cabling.sg@datwyler.com
www.cabling.datwyler.com

UNITED ARAB EMIRATES

Datwyler Middle East FZE
LB15, Office 210
Jebel Ali Free Zone
PO Box 263480
Dubai
T +971 4 4228129
F +971 4 4228096
info.cabling.ae@datwyler.com
www.cabling.datwyler.com

Datwyler Cabling Solutions LLC
Unit 1004 & 1005, 10th Floor, IB Tower
Business Bay
Dubai
T +971 4 4228129
F +971 4 4228096
info.cabling.ae@datwyler.com
www.cabling.datwyler.com