

The background of the slide features a row of dark grey server racks in a data center. The racks are filled with various electronic components, and some have small digital displays. The background is a deep blue with glowing blue lines and patterns, suggesting a digital or network environment. In the top left corner, there is a stylized graphic element consisting of a red and white chevron shape. The overall design is modern and tech-oriented.

# **SMART MODULAR DATA CENTRE**

## **CUTTING EDGE SOLUTIONS ACCELERATING YOUR DIGITAL TRANSFORMATION**



**DATWYLER**

## EMBRACE DIGITISATION

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

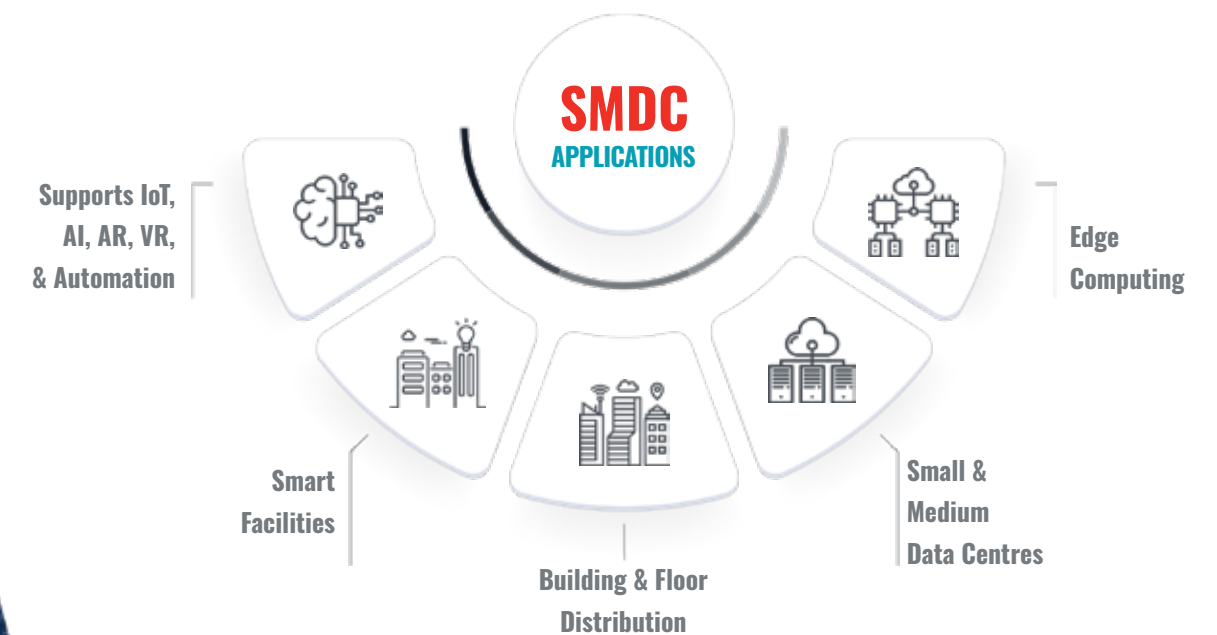
To capitalise on the opportunities which come with digitalisation, your organisation must rely on a smart and strategic IT infrastructure.

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.

This requires many small to medium-sized data centres that are smart and modular and can grow with increasing demands.

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.

## SMART MODULAR DATA CENTRE APPLICATIONS



## VALUE PROPOSITION



-  Tailored to your needs
-  Lower CAPEX & OPEX
-  Fully integrated / one vendor
-  Scalable & modular (Pay as you grow)
-  Prefabricated (quick deployment)
-  Fully remotely monitored
-  Lower carbon footprint

## WHY EDGE DATA CENTRES?

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



# DATWYLER SMART MODULAR DATA CENTRE

Datwyler's Smart Modular Data Centre is a state-of-the-art, pre-assembled plug-and-play IT infrastructure solution for edge computing that consists of one 42U rack, power distribution, uninterruptible power supply (UPS), cooling system, fire suppression system, air gap sealing and environment monitoring system. Complete data centre deployment within few hours, future-proof with multiple ways to configure power and cooling redundancy to meet the current demand while ready for future technology migration at no cost and less disruption. Datwyler's Smart Modular 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. Also it can be monitored and controlled in a single platform.

## SUB-SYSTEM DESCRIPTION

### FIRE SUPPRESSION (NOVEC 1230)

Rack mounted system to prevent fire hazard from spreading

### POWER DISTRIBUTION

Pre-wired power distribution panel with fault isolation to provide surge protection and rapid deployment

### UNINTERRUPTIBLE POWER SUPPLY

Rack mounted UPS with modular configuration to deliver continuous/purified power and protection to the IT equipment

### EQUIPMENT RACK

42U rack space for IT equipment with side cable management tray

### DUAL POWER INPUT

For higher cooling efficiency and noise reduction

### DATA CENTRE INFRASTRUCTURE MANAGEMENT

Real-time status reporting

### DOUBLE GLASS

For higher cooling efficiency and noise reduction

### SMART ACCESS CONTROL

Card or keypad

### EMERGENCY VENTILATION FANS

Extract hot air from the rack in case of cooling failure

### IN-RACK COOLING SYSTEM

Modular cooling system equipped with humidifier that ensures maximum uptime availability at an optimum IT environment

### BACKUP BATTERIES

Durable and scalable batteries to provide autonomy during power failures and disruptions

### LIGHTING AND VISUAL ALARM

Automated lighting system to ensure the best visibility and visual alarm during operation

### INTELLIGENT PDU

Far more than a power strip: equipped with intelligent power management



In-rack cooling type



Side cooling type

# SMART MODULAR DATA CENTRE SINGLE-RACK (3 KVA)

MODEL	40014180ZY	40014600ZY	40015990ZY	40078800ZY
Sensible cooling capacity	3.8 kW	3.5 kW	3.8 kW	3.5 kW
Internal condenser	No	Yes	No	Yes
Available space (U)	24 to 27U	22 to 25U	24 to 27U	22 to 25U
Rack Dimensions (W x D x H)	600 x 1400 x 200 mm - 42U		800 x 1400 x 2000 mm - 42U	
UPS capacity	up to 3 kVA			
IT load	up to 2.7 kW			
Backup time	10 to 15 minutes			
Power distribution module (PDM)	PDM6 input breaker 63A/1P*1			
Reliability	Tier 1			
Input voltage	220~240 VAC, 1Ph+N+PE 50/60 Hz			
Cable entry	Top / bottom access			
Emergency ventilation	Top of the rack and front door			
Fire suppression	Novec 1230 rack mounted			
Remote management	Cooling system, UPS access control*, iPDU*, environment setpoint and alarm notification (SMS / email)*			
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* or email* notification			
Mounting	Direct on floor or on raised floor			

# SMART MODULAR DATA CENTRE SINGLE-RACK (6 OR 10 KVA)

MODEL	40014190ZY	40014190ZY
Input voltage	220~240 VAC, 1Ph+N+PE 50/6 Hz	380~415 Vac, 3Ph+N+PE 50/60 Hz
IT load	5.4 kW	9 kW
UPS capacity	6 kVA	10 kVA
Available space (U)	27 to 31 U	24 to 28 U
Backup time	8 to 16 minutes	11 to 15 minutes
Sensible cooling capacity	5.5 kW	12.5 kW
Power distribution module (PDM)	PDM6 input breaker 63A/1P*1	PDM10 input breaker 125A/3P*1
Rack	SR600X1400 - 42U	
Reliability	Tier I, Tier II and Tier III	
Input voltage	220~240 VAC, 1Ph+N+PE 50/60 Hz	
Cable entry	Top / bottom access	
Emergency ventilation	Top of the rack and front door	
Fire suppression	Novec 1230 rack mounted	
Remote management	Cooling system, UPS access control*, iPDU*, environment setpoint and alarm notification (SMS / email)*	
Remote monitoring	Cooling system, UPS, power usage effectiveness (PUE), iPDU*, IT load, access control*, temperature, humidity and alarm status	
Alarm	Sound and light alarm with SMS* or email* notification	
Dimensions (W x D x H)	900 x 1400 x 2000 mm	
Mounting	Direct on floor or on raised floor	

The Smart Modular Data Centre is a tailor-made and customized solution to fulfil the customers' specific needs and requirements.  
\* Additional component is optional.

# SMART MODULAR DATA CENTRE MULTI-MODULE (UP TO 300 KVA)

## SUB-SYSTEM DESCRIPTION

### EQUIPMENT RACK

Rack mounted system to prevent fire hazard from spreading

### EMERGENCY VENTILATION FANS

Extract hot air from the rack in case of cooling failure

### UNINTERRUPTIBLE POWER SUPPLY

Rack mounted with modular configuration to deliver continuous / purified power and protection to the IT equipment

### DATA CENTRE INFRASTRUCTURE MANAGEMENT

Real-time status reporting

### POWER DISTRIBUTION

Pre-wired panel with fault isolation to provide surge protection and rapid deployment

### INTELLIGENT PDU

Far more than a power strip: equipped with intelligent power management

### CABLE CONTAINMENT

Integrated cable containment as part of the subsystem

### FIRE SUPPRESSION (NOVEC1230)

Rack mounted system to prevent fire hazard from spreading

### IN-ROW COOLING SYSTEM

Primary and redundant modular cooling system (CW & DX), equipped with dual power input an addition to humidifier that ensures maximum uptime availability at an optimum IT environment

### LIGHTING AND VISUAL ALARM

Automated lighting system to ensure the best visibility and visual alarm during operation

### SMART ACCESS CONTROL

Card or keypad



# SMART MODULAR DATA CENTRE MULTI-RACK (10 TO 40 KVA)

SPECIFICATIONS		
IT load	up to 36 kW	Remote management Cooling system, UPS, access control*, iPDU*, environment setpoint and alarm notification (SMS / email)*
UPS capacity	up to 40 kVA	
IT racks	up to 8 (static load 1300 kg / rack)	
Backup time	8 to 15 minutes	
Sensible cooling capacity	up to 50.4 W (CW or DX)	Remote monitoring Cooling system, UPS, power usage effectiveness (PUE), iPDU*, IT load, access control*, temperature, humidity and alarm status
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, Tier III and Tier IV	User interface 10.4" touchscreen and remote web interface
Mounting	Direct on floor or on raised floor	
Cable entry	Top / bottom access	Alarm Sound and light alarm with SMS* or email* notification
Emergency ventilation	Top of the rack and front door	
Fire suppression	Novec 1230 rack mounted	

# SMART MODULAR DATA CENTRE MULTI-MODULE (UP TO 300 KVA)

SPECIFICATIONS		
IT load	up to 267 kW	Remote management Cooling system, UPS, access control*, iPDU*, environment setpoint and alarm notification (SMS / email)*
UPS capacity	up to 300 kVA	
IT racks	up to 100 (static load 1300 kg / rack)	
Backup time	8 to 15 minutes	
Input voltage	380~415 VAC   50/60 Hz   3Ph+N+PE*	Remote monitoring Cooling system, UPS, power usage effectiveness (PUE), iPDU*, IT load, access control*, temperature, humidity and alarm status
Reliability	Tier I, Tier II, Tier III and Tier IV	
Mounting	Direct on floor or on raised floor	
Cable entry	Top / bottom access	User interface 10.4" touchscreen and remote web interface
Emergency ventilation	Top of the rack and front door	
Fire suppression	Novec 1230 rack mounted	Alarm Sound and light alarm with SMS* or email*

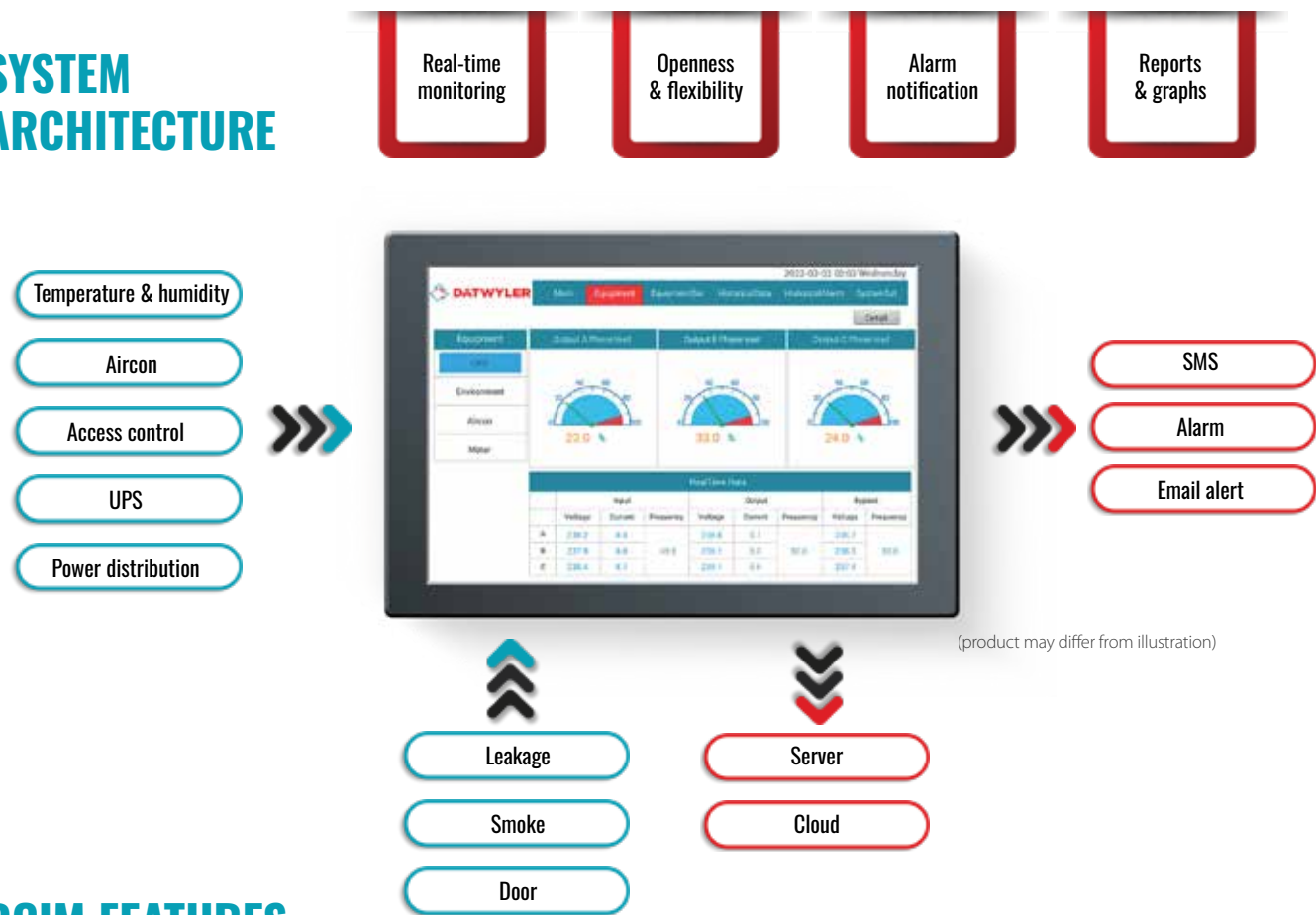
The Smart Modular Data Centre is a tailor-made and customized solution to suit with the customers' specific needs and requirements.  
\*Additional component is optional. The rack mounted fire fighting solution is optional. It can also traditionally cover the entire data centre space.

# DATWYLER DCIM

## DATWYLER SMART MODULAR DATA CENTRE (UP TO 300 KVA)

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



### DCIM FEATURES

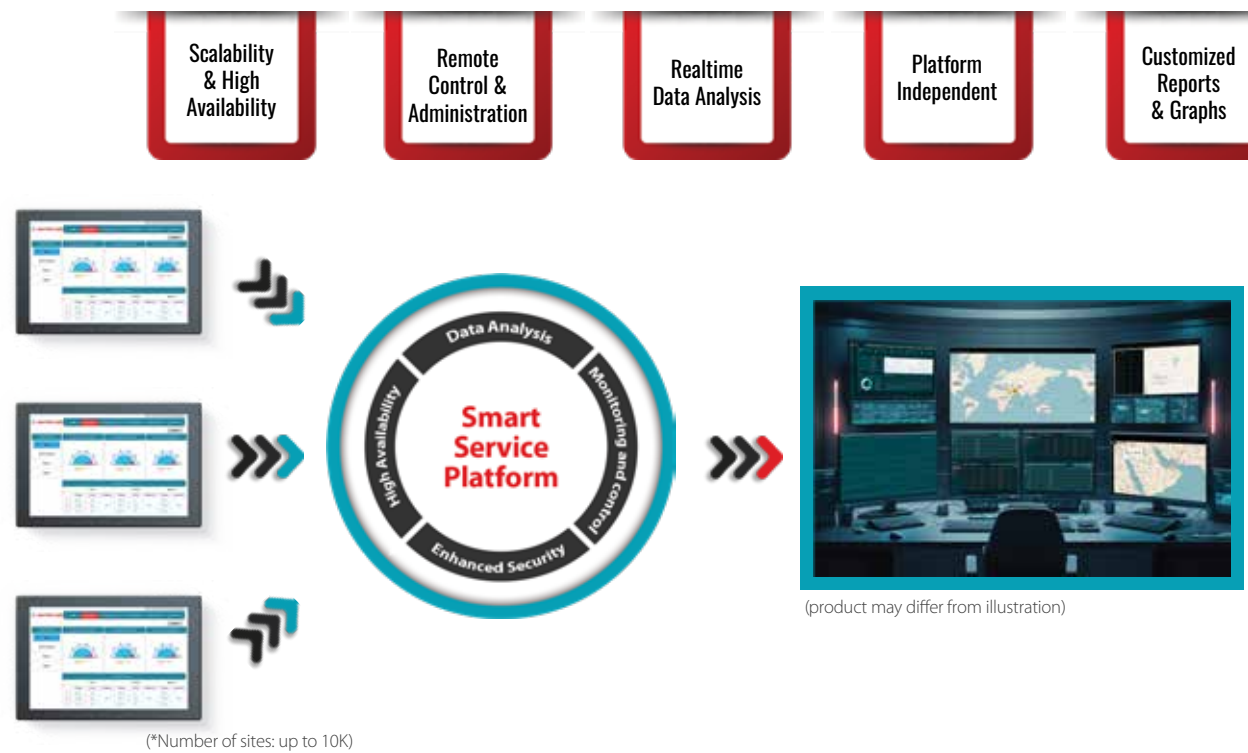
- UPS monitoring
- Capacity planning
- IT load monitoring
- Power management
- Face recognition for access
- Authorization management
- Real-time sensor monitoring
- Power usage effectiveness metrics
- Cooling system monitoring and control
- Environmental monitoring and threshold alerts
- SMS notification alerts
- Email notification alerts
- Multi-SMDC monitoring
- Event log management
- Energy efficiency analytics
- Smoke detector monitoring
- Remote monitoring and control
- Visual dashboards and reporting
- Water leak detection monitoring
- Integration with building management system

# DATWYLER SSP

## DATWYLER SMART MODULAR DATA CENTRE (UP TO 300 KVA)

Datwyler Smart Service Platform (SSP) helps the users to efficiently manage their IT infrastructure in different locations. Prevents bottlenecks, excels in monitoring, controlling and administration. Also the SSP offers qualities such as scalability, high availability, enhanced security, monitoring and analysis capabilities, task automation, and integration with other systems.

### SYSTEM ARCHITECTURE



### SSP FEATURES

- Scalability**  
Our system can easily handle the rapid growth of data centres while maintaining the optimal performance.
- High availability:**  
It ensures continuous data access, minimising service disruptions and maximizing uptime.
- Enhanced security:**  
Robust security measures, include advanced sensitive data stored in the data centres.
- Efficient resource management:**  
The system optimises storage resource utilization through dynamic allocation, saving space and reducing costs.
- Monitoring and analysis:**  
Powerful monitoring and analysis tools track data centre performance, detect potential issues, and enable proactive measures to optimise operations.
- Task automation:**  
The system automates recurring tasks such as backup, recovery, and data replication, saving time and improving operational efficiency.
- Integration with other systems:**  
Our solution seamlessly integrates with other infrastructures and management systems, providing connectivity and interoperability with tools used in the data centre environment.



ITinfra.datwyler.com



**DATWYLER**