

Products & Solutions

CANNON
TECHNOLOGIES GROUP

AiR
CANNON
AI READY

AI READY TURNKEY DATACENTRES

**Micro Data Centres, Modular Data Centres,
High Performance & Closed Loop Cooling**

Smart Modular Data Centres and infrastructure to meet the needs of Ai and other Nextgen compute, communications, edge and IoT applications

CANNONTECH.CO.UK



Designed and
Manufactured in
Britain

Global Leader in Enclosure Solutions

Cannon Technologies was established in 1978 by teams from the Parent RJF and Scammell groups with the objective of developing activity for the Defence and Commercial sectors.

With presence on all continents, Cannon provides cutting edge solutions for some of the toughest environments.

Cannon Technologies is an international leader in data cabinets and metal enclosure systems. They're used in the Data Networking, Telecommunications, Electronics and IT industries.

Today, Cannon Technologies is the sector world leader and known for high level of investment in product development

AI Ready Datacentres and Products

Modern digital infrastructure spans a wide range of applications, power densities and operating environments - from traditional IT and enterprise networks through to edge computing, communications, research facilities and high-performance workloads like AI. Cannon supports this breadth of demand through a comprehensive portfolio of indoor and outdoor enclosures, racks and modular data centre solutions, complemented by advanced thermal management, security and monitoring technologies.

Cannon's solutions are designed to securely house, protect and thermally manage critical 19" equipment across a broad spectrum of power and cooling requirements. From lower-density, air-cooled deployments through to high-density, AI and future-ready architectures, Cannon products deliver high performance, resilience and reliability across varied climates and use cases.

Our wide-ranging portfolio includes:

- Secure indoor and outdoor enclosures for enterprise, communications and edge infrastructure
- 19" server cabinets and racks supporting traditional IT, networking and high-performance applications
- Solutions for diverse sectors including telecommunications, utilities, transport, defence, healthcare, research and commercial data centres
- Thermal management technologies ranging from conventional air cooling through to advanced liquid and closed-loop solutions
- Modular and scalable designs, including Tier 3 or hybrid-rated architectures where required

Through this breadth of products and solutions, Cannon enables safer, more reliable and more efficient digital infrastructure - supporting today's operational needs while providing a clear pathway for future expansion and increased performance.

SCALABLE SOLUTIONS

FROM CABINET THROUGH CONTAINERISED TO DATA CAMPUS SOLUTIONS


Products and solutions for all power densities and cooling needs

Cannon's AiR portfolio enables customers to:

- Start with traditional IT and edge deployments
- Scale seamlessly into high-density and AI workloads
- Maintain a single monitoring, service and support framework
- Protect investment through modular, upgrade-ready design.

From rack → micro DC → modular → campus

Cannon delivers a continuous, future-proof pathway

	< 5 kW	5 - 20 kW	20 - 60 kW	60 - 100 kW	100 kW - 1 MW	>1 MW
			 AiReady			
SMART-X / EPIC-X Racks	✓					
SMART-X / EPIC-X + In-Row		✓				
SMART-X / EPIC-X + RDHx			✓	✓		
Outdoor Cabinets (Thermally Managed)	✓	✓	✓	✓		
Micro Data Centre (Closed Loop)			✓			
Micro Data Centre (Rear Door)				✓		
Containerised MDC			✓	✓	✓	
Smart Data Campus					✓	✓

TRADITIONAL TO MEDIUM DENSITY

SMART-X AND EPIC-X

SMART-X and EPIC-X - Traditional to Medium Density IT

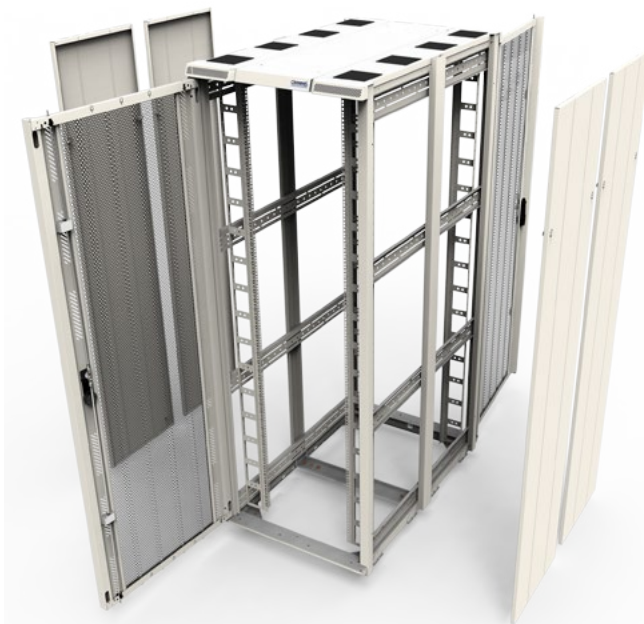
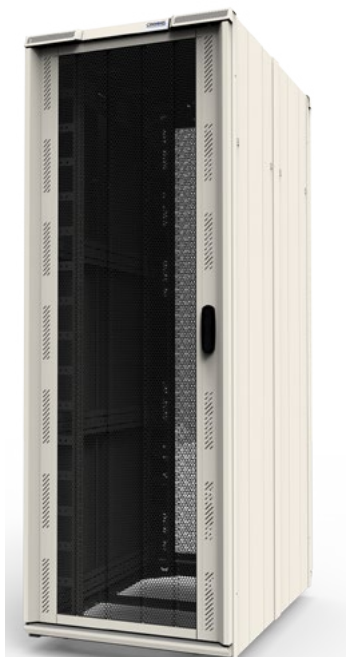
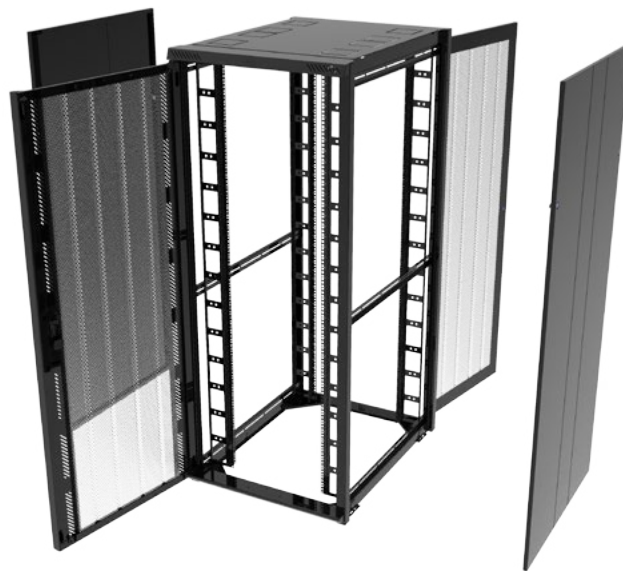
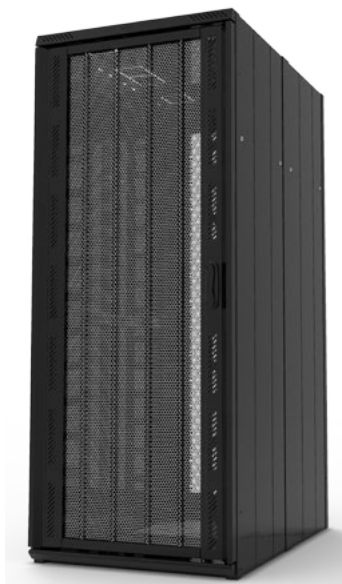
Typical rack loads: up to 5 kW per rack (air cooled)

SMART-X and EPIC-X 19" cabinets provide a robust foundation for traditional IT, enterprise, comms and edge applications. They are optimised for efficient airflow management and can be deployed standalone or within hot / cold aisle containment.

Upgrade path:

With-in-row cooling integration - Rear Door Heat Exchanger (RDHx) - Transition into Micro DC or Modular DC architectures without replacing the rack estate

This approach protects initial CAPEX while enabling a smooth migration to higher densities.



OUTDOOR SOLUTIONS

OUTDOOR CABINETS AND SOLUTIONS

Outdoor Cabinets - Communications and Edge DC

Designed for telecoms, utilities, transport and secure edge deployments.

Key capabilities:

- Integrated thermal management (ACU, heat exchangers, free cooling options)
- SR3 security option (LPS 1175)
- Electronic locking and access control
- IP-rated construction for harsh environments
- Remote monitoring, alarms and reporting via CannonGuard NGEN Estate.

Typical deployments include RAN, FTTx, edge compute, rail and roadside infrastructure where resilience, security and remote visibility are critical.



AI READY MICRO DATA CENTRE 19" CABINET

SCALABLE AI READY DATA CENTRES

High-Performance, Scalable Design (Ai Ready)

The increasing diversity of modern IT, communications and compute workloads has driven the need for solutions that balance efficiency, scalability and reliability across a range of power densities. Designed to support everything from traditional and medium-density IT through high-density and next-generation applications, this cabinet provides a flexible, future-proof foundation for modern data centre environments.

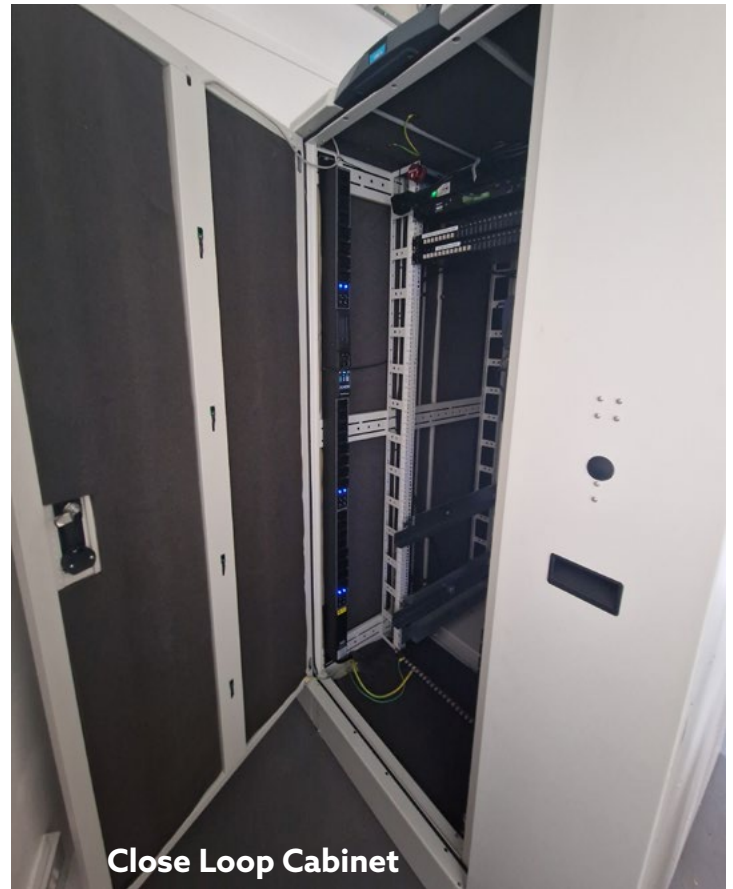
The cabinet incorporates advanced thermal and acoustic insulation, precise cooling options including air, closed-loop and rear-door technologies, and a modular construction that simplifies installation and adaptation as requirements evolve.

Configurations are available to support workloads up to 60 kW using closed-loop cooling or up to 100 kW with rear-door heat exchange, while remaining equally effective at lower and medium power densities.

Engineered for flexibility, the design supports multiple power and cooling architectures, including dual power feeds, split construction for standard doorway access, and compatibility with side-mounted chilled-water systems.

Robust airflow management and hot-swappable components help maximise operational efficiency, minimise downtime and ensure consistent performance across a wide range of deployment scenarios.

Cannon's engineering teams support the deployment of reliable, scalable micro data centre solutions, tailored to current operational needs while providing a clear pathway for future expansion and increased density.



SMART MODULAR CABINETS

30KW, 60KW AND 100KW CABINETS

30kW CLOSED LOOP - SPECIFICATIONS

- 30kW side mounted chiller water system
- Cooling Capacity: 30kW
- Single feed 1" chilled water flow and return, connected to external 30kW chiller (free cooling option available)
- Width: 1100mm, Depth: 1200 / 1400mm

WATER SPECIFICATIONS

- Entering Water Temp: 10 to 15°C (5°C delta T)
- Flow Rate: 75 litres / minute at 3 bar pressure

AIRFLOW - 30kW Cooling

- Max: 6600 m3/h 3870 CFM
- Nominal: 5940 m3/h 3500 CFM
- Air per KW: 115 CFM



60kW CLOSED LOOP - SPECIFICATIONS

- Dual 30kW side mounted chiller water system
- Cooling Capacity: 60kW or 30kW N+N
- Single feed 1" chilled water flow and return, connected to external 60kW or 30+30kW (2N) chiller (free cooling option available)
- Width: 1400mm, Depth: 1200 / 1400mm

WATER SPECIFICATIONS

- Entering Water Temp: 10 to 15°C (5°C delta T)
- Flow Rate:
75 L/min at 3 bar pressure @ N+N (30+30kw)
150 L/min at 3 bar pressure @ N (60kw)
Dependant on internal & external chiller configuration

AIRFLOW - 60kW or 30kW N+N Cooling

- Max: 13200 m3/h 7770 CFM
- Nominal: 10980 m3/h 6460 CFM
- Air per KW: 105 CFM

REAR DOOR - SPECIFICATIONS

- Rear door chilled water system 500mm deep
- Cooling Capacity: up to 100kW
- Single feed 1½" chilled water flow and return
- Width: 800mm, Depth: 1200 / 1400mm + 500mm door

WATER SPECIFICATIONS

- Entering Water Temp: 15 to 20°C (7.5°C delta T)
- Flow Rate: 200 litres / minute at 3 bar pressure

AIRFLOW - 100kW

- Max: 16150 m3/h 9500 CFM
- Nominal: 14450 m3/h 8500 CFM
- Air per KW: 95 CFM



SMART MODULAR DATA CENTRE

SMART-GT "GLOBETROTTER"

Modular SMART-GT - Transportable Module

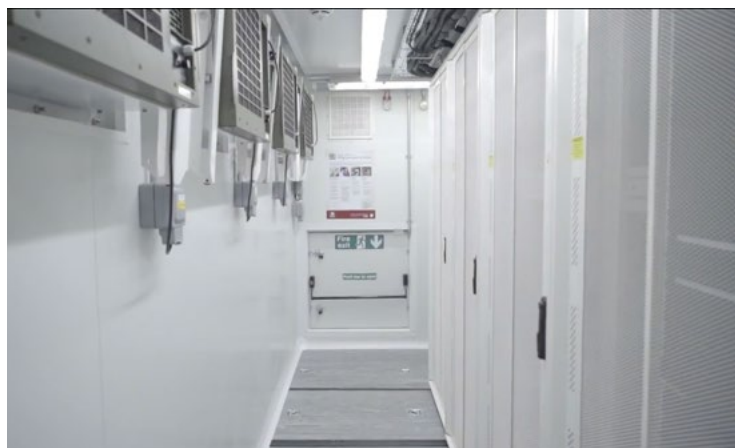
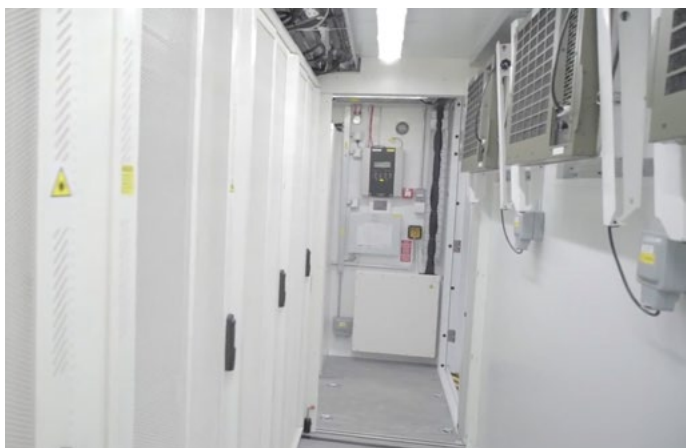
Cannon's SMART-GT "Globe Trotter" is a compact, transportable module within the Smart Modular Data Centre portfolio, designed to deliver secure, resilient infrastructure wherever it is required. Suitable for power densities ranging from lower-load deployments through to approximately 50 kW, SMART-GT supports a wide variety of applications across enterprise, communications and edge environments.

The module incorporates all the essential elements of a modern data centre or network equipment room, including power distribution, cooling, security and monitoring, within a factory-engineered, rapidly deployable format. This makes SMART-GT well suited to disaster recovery and business continuity, edge network compute, AI, communications infrastructure, temporary or remote sites, and enterprise client NER deployments.

Designed for flexibility and reliability, SMART-GT can be deployed as a standalone solution or integrated into larger modular or campus-scale facilities. Its scalable architecture enables rapid delivery of efficient, right-sized infrastructure while providing a clear pathway for future expansion as operational requirements evolve.

KEY BENEFITS

- Reduced PUE
- Low CAPEX and OPEX
- Scalable platform modules
- Turnkey and IT ready options
- Pay-as-You-Grow modular design
- Rapidly Deployed
- Can incorporate 3rd party systems
- Future Proof advantages
- Extreme Power/Cooling



SCALABLE MODULES

100KW, 250KW, 500KW AND 1MW PER MODULE



Containerised MDC with roof

Typical module capacities:

100 kW, 250 kW, 500 kW - Up to 1 MW per module

Includes SMART-GT (Globetrotter), containerised MDCs and scalable Smart Data Campus solutions. Modules are factory-built, rapidly deployed and designed to Tier 3 (or hybrid) architectures.



Containerised MDC open module

SMART MODULAR DATA CENTRE

TURNKEY DATA CAMPUS

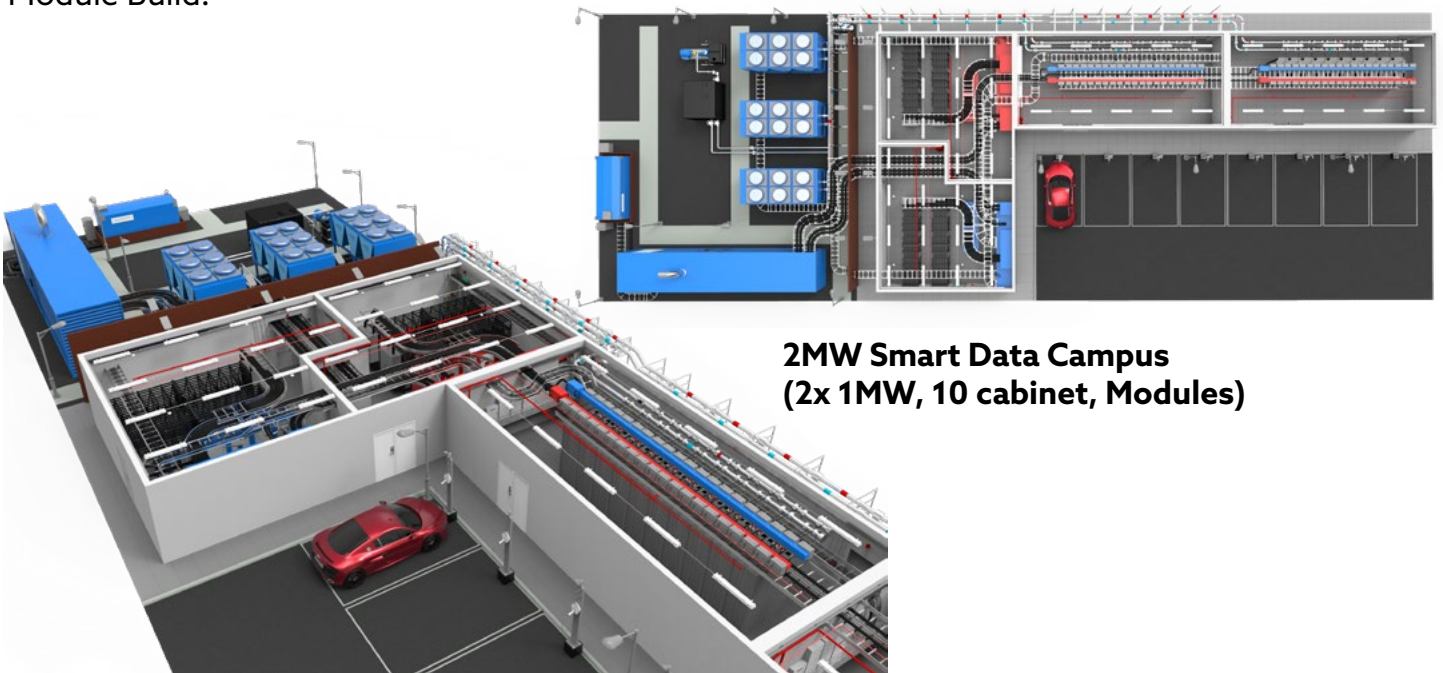
SMART Modular Solutions

The Cannon Smart Data Campus provides all of the essential elements of a modern high performance Tier 3 (or hybrid) Data Centre embodying proven concepts.

The advanced design of each of the modules provides every key feature required to rapidly build a modern, Turnkey, Ai Ready Data Centre with all of the efficiencies and advantages offered by the latest technology. Virtually any size can be achieved with either our Granular Modular construction or our Big Module Build.

KEY BENEFITS

- Reduced PUE
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- Scalable platform modules
- Turnkey and IT ready options
- Pay-as-You-Grow modular design
- Rapidly Deployed
- Can incorporate 3rd party systems
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**2MW Smart Data Campus
(2x 1MW, 10 cabinet, Modules)**



SCALABLE MODULES

100KW, 250KW, 500KW AND 1MW PER MODULE

PRE-ENGINEERED MAIN MODULES

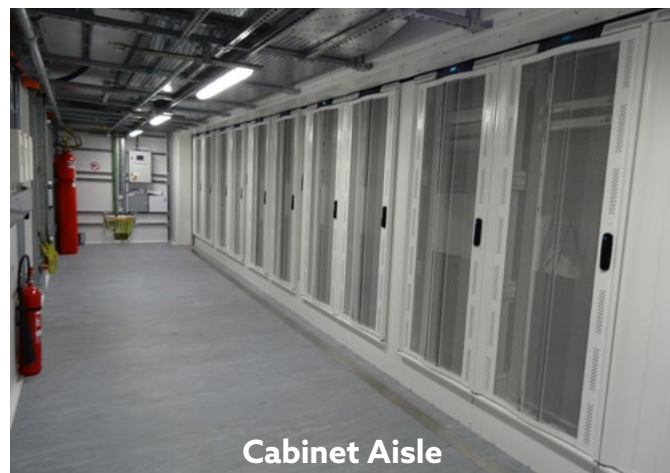
- Data Halls
- NOC Rooms
- Work rooms and offices
- Entry systems and people traps
- Storage areas
- Stair and lift modules
- Special application modules for surveillance etc
- Power and cooling modules
- Personnel modules of various types

The Cannon solution is unique; Sub-module options form the working infrastructure and are designed to ensure a totally integrated, holistic solution and are deployed in the world's leading Tier 1 to Tier 4 Data Centres.

This ground up design and efficient integration provides a cutting edge solution with compact, effective layout, minimising wasted space and enhancing performance.

SUB MODULES

- Raised floor system
- IT White space complete with racks / cabling
- Various racks include Server, cabling, battery, UPS, PDU, etc
- Cable Raceway system
- Freeform pockets for vendor neutral equip
- With-In Row Cooling Pockets
- With-In Row UPS's
- With-In Row Power Distribution
- Data + Power Cabling



Cabinet Aisle



Power



Revolving Door Access



Plant

SMART MODULAR DATA CENTRE

DATA CAMPUS PODS

Smart Data Campus 'Pod' Construction

All components are pre-made, high quality, man portable precision parts. Simplifying the process of fitting-out within the shell building, as access through small or difficult access points poses no problem.

The components are 'flat packed'. Transport to sites with difficult access is easy. No cranes or heavy construction equipment is required for the build.

Non-Intrusive Deployment

Only hand, battery operated tools are used during the assembly process, there are no wet trades, cutting or dust, there is no disturbance to occupiers of other facilities within the building, or in the vicinity.

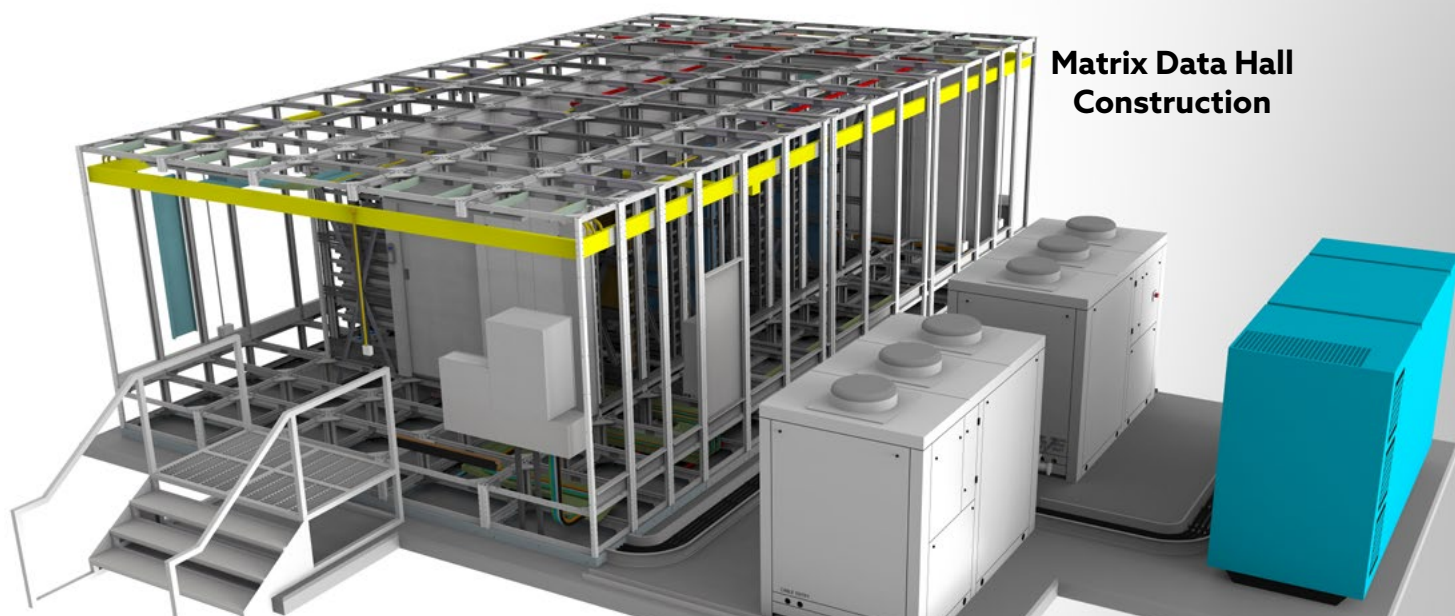
Rapid Availability

The mechanical and electrical infrastructure comprises pre-made modular systems, enabling a complete, commissioned & tested data centre to be available in a few weeks rather than years.

KEY BENEFITS

All the features of traditional data centres can be incorporated into Turnkey Data Halls including

- Large switch and SAN racks, 3rd Party cabinets and 'freeform' space
- Within row, over floor or underfloor cooling
- UPS and Integrated switchgear, separate power, Cooling, M&E plant rooms
- Fire protection using gas or water based systems (FK-5-1-12)
- Secure mantraps, diverse cabling with multi level, colour cable & fibre raceways
- Wide aisles both Hot and Cold containment.
- Space saving sliding doors
- Environmental and power monitoring, DCIM, Dashboards, remote monitoring, CCTV, Access control and Security
- Free cooling water chillers
- Standby and Prime generators. Rotary UPS
- Rating to resilience levels 1, 2, 3 or 4 (TIA 942-A)



Matrix Data Hall Construction

SUB-MODULES

EXAMPLES OF DEPLOYED SUB-MODULES

Ai Ready / IT Ready

Racks / Cabinets, Power Distribution, UPS, Battery systems, Fire Protection, Cooling units –are all quickly installed when the white space is fitted out. The Cannon cable and fibre raceway system is built in allowing for simple installation of pre-terminated copper and fibre cabling.

Infrastructure

The operational infrastructure within the Cannon Data Hall Pod is state of the art, and is identical to the systems underpinning some of the world’s most advanced data centre operations, ensuring proven high efficiency and resilience.



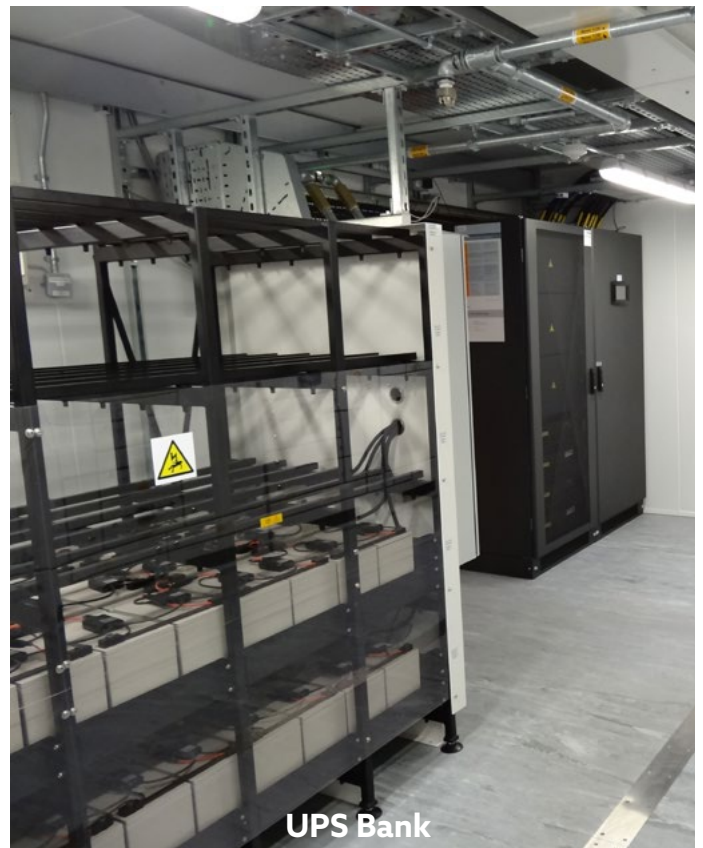
Fire Supression



Power Distribution



Power Distribution



UPS Bank

CannonGuard - Remote Monitoring and Management

The CannonGuard N-GEN Estate platform provides the visualisation of highly accurate real time and historical reporting information combined with advanced alerting and alarming of any measured power, energy or environmental parameter across the entire estate.

CannonGuard N-GEN Estate centralises information across the EPMS infrastructure offering site wide views of utilities, total consumptions and the granular monitoring of plant equipment, sub distribution and individual payloads.

Power Quality reporting is an integral part of the reporting capabilities of CannonGuard N-GEN Estate.

Visualisation

N-GEN Estate provides intuitive yet simple to navigate tiered views. Designed to move between each view via a 'single click', a user can navigate from global estate overviews through to more granular data relating to individual sites, buildings, circuits, or payloads within a matter of seconds.

This tiering architecture facilitates and meets the needs of multiple roles within an organisation.

Reporting

Utilising time series database monitoring, key parameters are tracked, monitored, down sampled and aggregated. This allows the same platform to collect half hourly data from utility meters whilst polling and recording mission critical data such as residual current monitoring every couple of seconds.

Users can download graphical representations of measured parameters throughout all tiers, from building point of entry to a payload.

3rd Party Integration

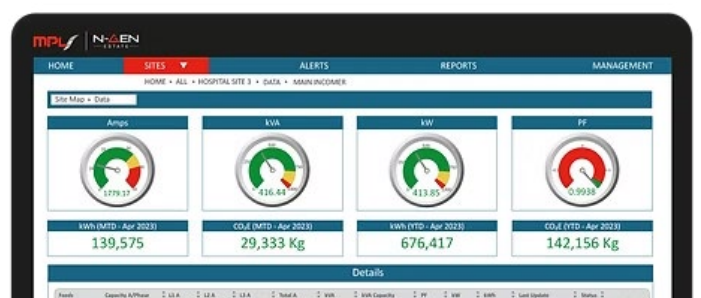
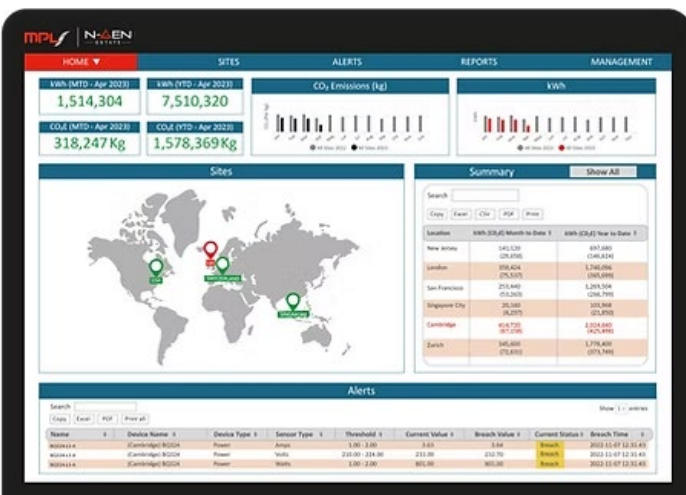
Integration adopts a 'plug in' type strategy, data is collected into the platform via SNMP, Modbus, REST APIs and wireless protocols. Users can set thresholds on any custom field and visualise the data on the platform.

Alarms and Alerts

Alerts can be set for any monitored parameter via defined thresholds. Parameters include power, energy, environmental conditions, physical security and critical warnings.

KEY FEATURES

- Remote management
- Visualisations
- Reporting
- Security integration
- Alarms and alerts



COMPLETE SUPPORT

INSTALLATION, SUPPORT, MAINTENANCE

Our in-house technical engineering team supports clients from initial concept through to reality

Cannon's Level 6 Services provide a complete, end-to-end delivery model that extends beyond product supply to include design, integration, installation and ongoing support. This approach ensures Cannon solutions are delivered fully configured, operational and ready for use across a wide range of market sectors and deployment environments.

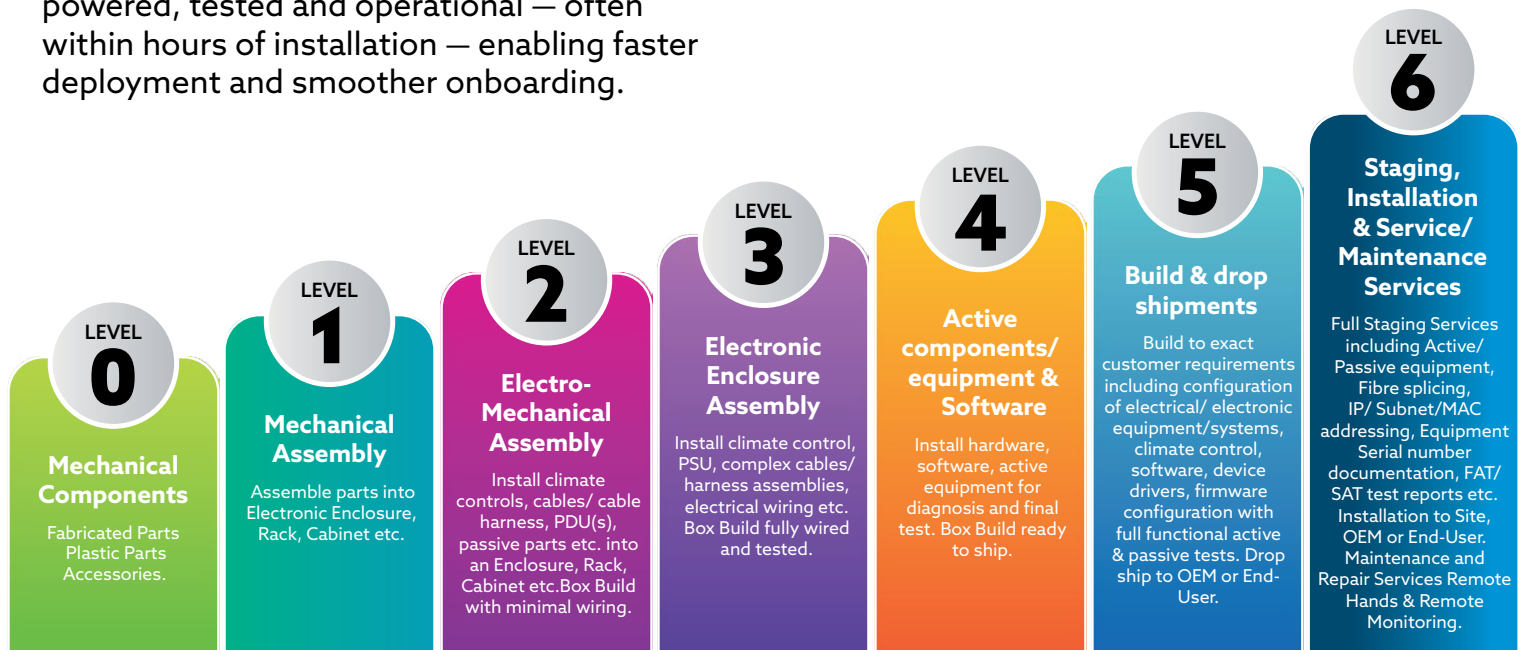
Services span the full project lifecycle, including concept design and engineering, system integration, wiring and pre-configuration, factory staging and testing (FAT/SAT), installation, commissioning, relocation and ongoing field support. By undertaking these activities off-site wherever possible, Cannon reduces onsite risk, shortens deployment times and accelerates time-to-value.

Level 6 Services also include management of customer-supplied equipment, integration of active and passive components, software and firmware installation, and full system configuration. Solutions are delivered powered, tested and operational – often within hours of installation – enabling faster deployment and smoother onboarding.

Ongoing support is provided through remote monitoring, electronic locking and access management, together with planned and reactive maintenance services. This ensures consistent performance, service continuity and long-term operational reliability.

Cannon enclosures and infrastructure can be configured to meet specific environmental, security, thermal and future-growth requirements, supported by a wide range of options including cable and fibre management, passive and active cooling, environmental protection and pre-wired, certified electrical systems.

Through this integrated service and product approach, Cannon enables organisations across enterprise, data centre, communications, transport, utilities, defence and other critical sectors to deploy and operate infrastructure more efficiently, securely and with confidence.





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