EQUINIX | TELECITY

Where Opportunity Connects

Data Centre

Powergate, London

Flexible, advanced and efficient by design.

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Data Centre, Powergate

Front cover image
Exterior photo of Powergate

This page
Customer data centre tour



29MW

Powergate delivers 29MW
of customer capacity.

An advanced data centre. Built to deliver maximum resilience, flexibility and choice.

Powergate provides 15,000m^2 of data centre space and 29 megawatts (MW) of customer capacity. Delivering flexible power densities of up to 20 kilowatts (kW) per rack, the facility offers highly resilient infrastructure, superb power availability and choice of networks.

Many of the world's leading organisations rely on Powergate, including financial institutions, cloud operators, content companies, healthcare corporations, energy firms, and mobile businesses. Each organisation places its trust in our onsite engineers to provide responsive, expert and hands-on support round the clock.

Performance from a proven data centre
Since its opening, Powergate has established itself as London's most advanced data centre and has experienced unprecedented demand – which is why we have invested £120m to more than double our data hall footprint and power capacity – ensuring your business has room to grow.

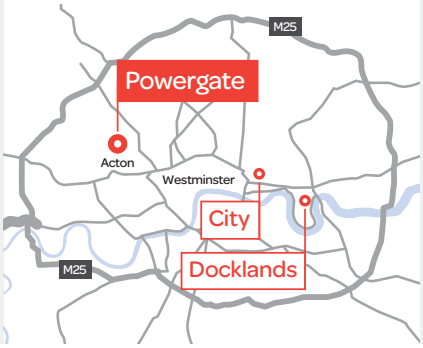
As a proven data centre, customers rely on Powergate to deliver flexible, accredited, always-available data centre solutions.

Leading the data centre industry
As multiple award winners for data centre design, we are drawing on our knowledge and experience gained from Powergate phase 1 and of building and operating data centres across Europe that lead the industry for resilience, connectivity, reliability and performance.

Powergate incorporates many new technologies and designs that place the facility at the forefront of environmental efficiency.

- **Advanced and efficient by design**
  Powergate provides fully resilient power and cooling capacity of up to 20kW per rack as standard.
- **Carrier-neutral**
  You can directly connect to an unparalleled choice of networks, international carriers, content delivery networks, ISPs and peering points.
- **Setting the standard**
  Like all Equinix Telecity data centres, Powergate is designed to meet international standard for environmental strategy and quality.
- **Expertise you can trust**
  Our operational expertise is industry leading. You are not just relying on our data centres, you are trusting our experts.
- **Prime location**
  Situated close to the centre of London within zone 2 and near the city's many transport links, Powergate is easily accessible and delivers superb availability of power and networks.

Central London location



Daily equipment checks



20kW

Flexible, scalable power densities deliver up to 20kW per rack.

Outstanding data centres. Expertise you can trust.

Committing to excellence

Our data centres are certified to the following international standards:

ISO 27001
Information Security Management.

ISO 9001
Quality Management.

ISO 14001
Environmental Management.

OHSAS 18001
Occupational Health and Safety Management.

PCI DSS certified

Payment card industry data security standards

EU Code of Conduct for data centres – Corporate Status
Benchmarks for data centre efficiency and best practice.

Carbon Trust Standard
Recognises our commitment to cutting carbon emissions.

Powergate provides your business with a wide range of benefits.

More power as standard

The data centre delivers high-density power up to 20 kilowatts (kW) per rack as standard, allowing you to do more with less.

Flexibility to scale to your needs

The data centre's flexible and modular design means its infrastructure can scale and adapt exactly to your organisation's requirements and long-term strategic needs. By delivering high-density power as standard, the data centre can manage even the most demanding infrastructure.

Highest levels of resilience and redundancy

Powergate has been designed as a Tier 3 data centre with several Tier 4 features. Its high levels of resiliency and redundancy, coupled with our people's engineering expertise, will ensure your critical systems are secure and always available.

Maximising energy efficiency and reducing costs

The data centre's energy-efficient design and innovative technologies will not only help you meet your sustainability targets. As energy efficiency is built into every aspect of the building, your business will also enjoy lower costs.

Unrivalled connectivity options

As a carrier-neutral data centre Powergate provides you with an unparalleled choice of connectivity networks, international carriers, content delivery networks, ISPs and peering points. This lowers latency and points of failure, enhancing the end-user experience and helping you reduce communications costs.

Making installation easy

Powergate features a logistics centre with a loading bay, a secure storage area for short-term equipment storage, and dedicated secure staging rooms. The logistics centre receives and processes deliveries 24 hours a day, seven days a week. This combined with our 2.5 tonne goods lift helps makes installation easy.

Supporting you 24x7x365

Equinix Telecity has a team of data centre experts dedicated to supporting your business. Staffed 24 hours a day, customers have access to our skilled engineering, managed services and networking professionals. Each one committed to delivering exceptional service and solutions.

Maintaining for the future

We have a rigorous and comprehensive maintenance programme for Powergate. Every day, over 100 checks are performed on the core infrastructure and building management systems.

Resilient and redundant. A data centre you can rely on.

Inside the generator enclosure



Designed and built by engineering experts, Powergate is a standard-setting data centre that ensures your critical systems are always available.

Power

Powergate provides robust and reliable power with flexible densities and configuration between 4kW and 20kW per rack.

- 29MW of UPS conditioned power at 2N.
- Redundant 66kV HV power system diversely-fed from the grid with a dedicated onsite step-down substation.
- Back-up diesel generation at N+1 to support site load in the case of HV failure.
- Maximum diversity and separation of UPS system and power distribution through dedicated A & B supplies.

Cooling

A robust HVAC system delivers stable air flow, temperature and humidity for efficient equipment operation. Designed to Tier 3, the HVAC system provides a minimum of N+1 redundancy and all CRAC units and pumps have dedicated back-up UPS systems. Our design and investment in cooling systems will ensure the data centre achieves a class-leading PUE of 1.35.

- Minimum N+1 redundancy on chilled water cooling system.
- Fully concurrently maintainable, dual path secondary chilled water distribution.
- Close Control Units (CCUs) provide conditioned air to the data floor, at a minimum N+2 redundancy.
- Cooling towers enhance efficiency and maximise the use of free cooling.
- Centrifugal chillers with variable speed compressor drives enable excellent full and part-load operation.



Fire detection and suppression

Linked to our Building Management Systems (BMS) and monitored continuously from the network operations centre, our fire detection and suppression systems minimise the risk, and suppress quickly to localise and prevent problems spreading.

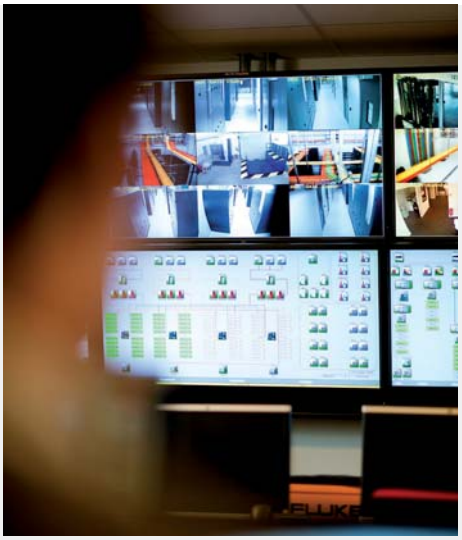
- High sensitivity smoke detection systems.
- Fully addressable two-stage fire detection system that monitors the underfloor, room and ceiling void space (smoke and heat).
- State-of-the-art water mist fire suppression system.
- Network-monitored and fully integrated fire-protection system.



Security and access

Powergate adopts a layered approach to security and access, operating from the outer perimeter and inwards to the building. Our robust access control procedures allow you and your nominated staff and contractors, easy access to enter the facility at all times throughout the year.

- Integrated digital video camera surveillance throughout the exterior and interior.
- Unified security-breach alarm with access monitoring.
- Secure monitored single-person entry.
- Independent client card and biometric identification access system.
- 24/7/365 manned security.
- Secure managed delivery and loading bays.



Building Management Systems (BMS)

Our sophisticated BMS manages and monitors the core aspects of the data centre's mechanical and electrical infrastructure, from power supply, temperature and humidity to fire detection and suppression, and access and security.

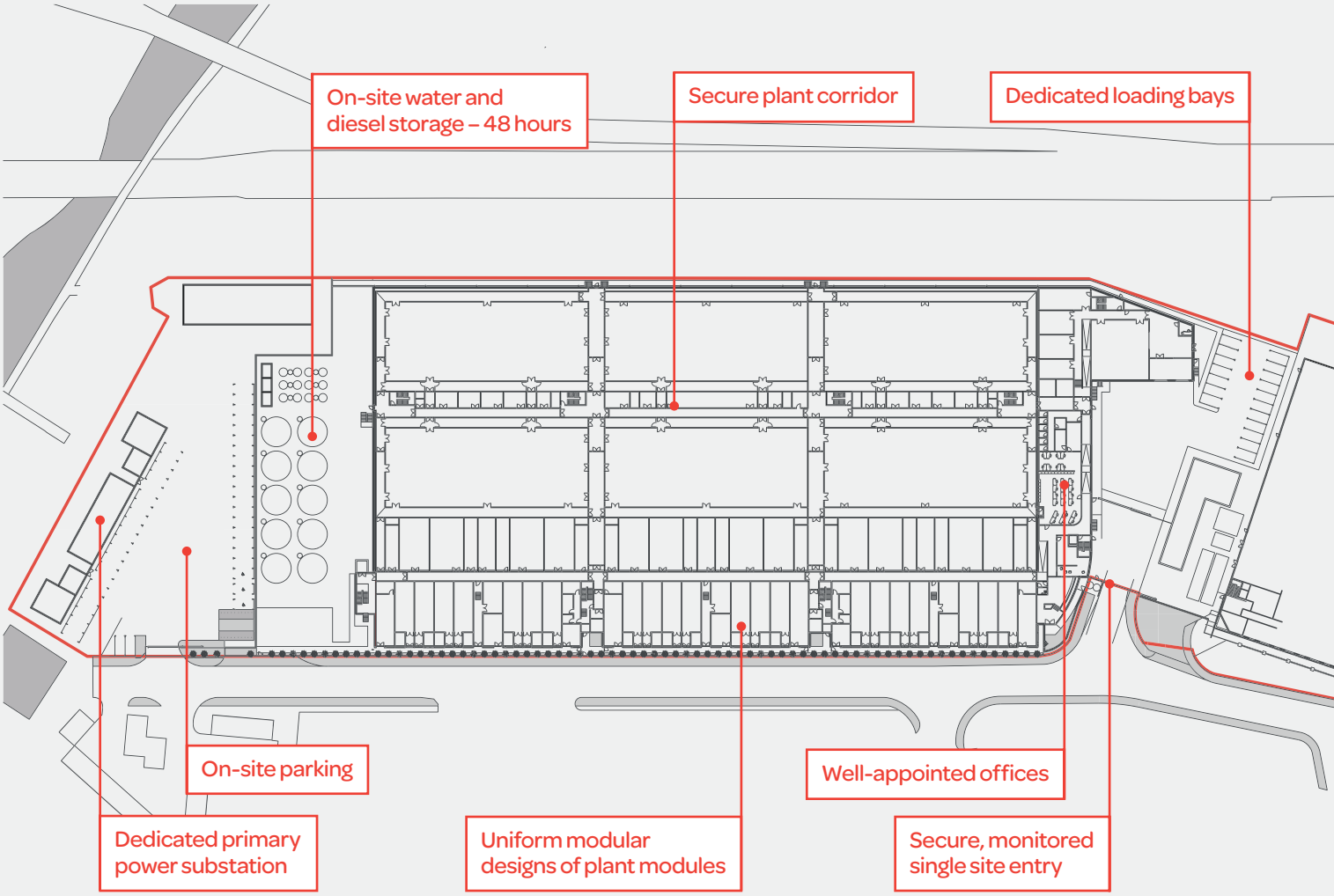
- 24/7/365 monitoring by onsite personnel.
- Audio and visual alarms.
- Monitoring and managing critical parameters.
- System performance and facility data generation.
- PMS (Power Monitoring System)

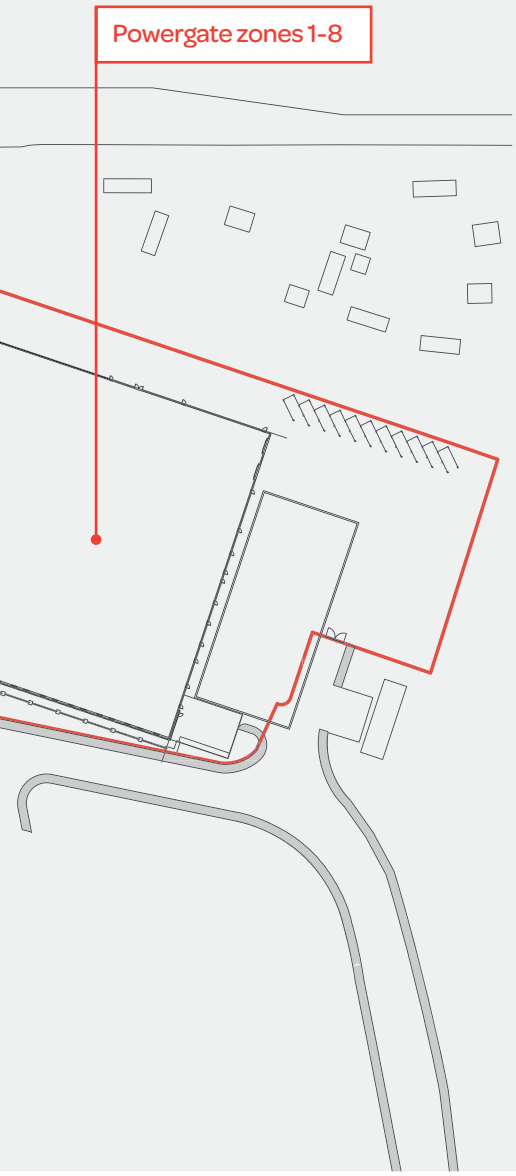
A Regional Monitoring Centre (RMC) provides support to the local team, monitoring all critical systems, BMS and EMS alarms throughout the Equinix Telecity UK estate, ensuring events are escalated.

Powergate data centre. Giving you the flexibility to grow.

Powergate delivers the capacity, power, resilience, redundancy and flexibility required to support your business.

Powergate Facilities





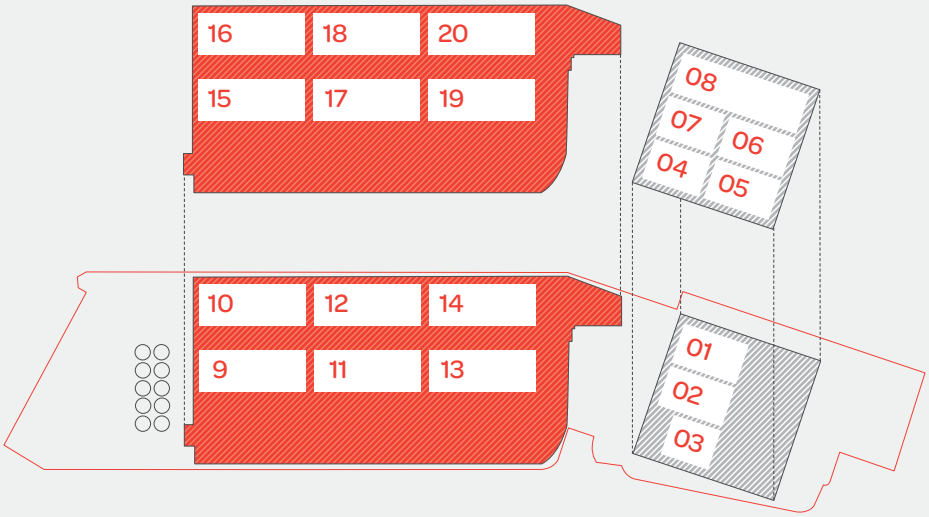
Powergate Data Rooms
Powergate provides 15,000m² of customer capacity in 20 zones over 2 floors.

Powergate Zones 9–20

First floor – Zones 15–20

Powergate Zones 1–8

First floor – Zones 5–8



Ground floor – Zones 9–14

Ground floor – Zones 1–3

Designed to maximise energy efficiency. Delivered to reduce costs.

Inside the pump room



Powergate has been designed to deliver exceptional energy efficiency that helps reduce environmental impact and data centre operational costs.

Power Usage Effectiveness (PUE) and transparency

Energy efficiency is central to our transparent approach to power charging. Powergate is designed to achieve an industry-leading annual average PUE of 1.35 at full design load – and we pass the benefit (and lower power costs) derived from this efficiency directly on to our customers.

Energy-efficient technologies

Powergate features many processes and technologies that increase efficiency and reduce costs:

- Maximising the use of free cooling from the chilled water system.
- Energy efficient cooling towers and UPS technology.
- Use of waste heat from the data centre to heat office space.
- Chillers with excellent 'turn-down' characteristics to match capacity with load.
- Hot and cold air segregation.
- Motion-activated light controllers that reduce energy consumption and heat load.

Sustainability

The architectural design of Powergate incorporates many sustainable features, including:

- Rainwater harvesting
- Waste management
- High recycling levels
- Sustainable landscaping
- Reusing waste heat
- Use of sustainable materials

Committed to excellence in environmental efficiency

We adhere to stringent industry standards and lead the market in environmental initiatives:

- ISO 14001 – an internationally recognised accreditation for organisations that demonstrate superior environmental management.
- EU Code of Conduct for data centres – Corporate Status. Joule House has been audited and is operated to the Code's best practices for maximising energy efficiency.
- Carbon Trust Standard – recognising our commitment to reducing our impact on climate change.

Unrivalled connectivity. Unparalleled choice.

Patch panel



As a carrier-neutral data centre Powergate provides you with an unparalleled choice of connectivity options.

We deliver direct access to the widest possible selection of international and local fixed lines, broadband and mobile networks, internet exchange points, content distribution networks, financial services companies, and cloud hubs.

This wide choice of connectivity options allows your business to connect quickly and cost-effectively. It also enables you to link easily with other enterprises, helping your organisation profit from new business opportunities.

Connectivity

Direct connectivity to a wide range of onsite carriers:

- Abovenet
- BT
- Cable & Wireless
- China Telecom Europe Ltd
- Cogent Communications
- Colt Telecommunications
- euNetworks
- Exponential-e
- Gamma Telecom
- Geo
- IX Reach
- Jersey Telecom
- Level 3
- Qwest Communications
- Sprint
- Verizon Business
- Virgin Media

Our DWDM network service also provides access to over 400 additional connectivity providers through our European data centre network.

Managed connectivity service with multiple carriers

You can connect directly to our IP Multihome service, which allows you to distribute content through multiple Tier 1 carriers and IXPs, without the complexity of maintaining multiple contractual and peering relationships.

Pan-European connectivity across our data centre network

We deliver seamless connections to all other Equinix Telecity data centres. A DWDM network, supporting ethernet over MPLS and FC services, connects our Docklands, City and Powergate data centres, and extends to our European sites.

Global peering and connectivity

Connectivity with LINX, the London Internet Exchange is available onsite, bringing you global peering and connectivity options.

Flexible and resilient connectivity infrastructure

- 'Meet me' rooms on each floor adjacent to the data halls offer diverse network connectivity, enabling you to connect quickly and easily with partners and providers through cross-connects.
- Diverse fibre entry points into the building.

Visit Powergate. Take the tour.

Powergate is an advanced industry leading data centre.

Built to deliver maximum resilience, power density, flexibility and choice.

To meet our team and take a guided tour of Powergate, contact us on:

+44(0)20 7001 0101
or email: uk.info@telecity.com

For a digital walkthrough of Powergate data centre, visit:

www.telecitygroup.com/powergate

Close Control CRAC units



EQUINIX | TELECITY

Outstanding data centres. Expertise you can trust.

TelecityGroup has been acquired by Equinix, Inc. (Nasdaq:EQIX) the interconnection platform for the world's leading businesses.

www.telecitygroup.com