

LON1 CyrusOne Data Center

 12 Liverpool Road Slough, Berkshire SL1 4QZ United Kingdom



Introduction

Strategically located in Slough, one of the UK's premier data center locations, CyrusOne LON1 delivers 8.72MW of IT power to 4,309 sqm (46,382 sq ft) of world-class technical space.

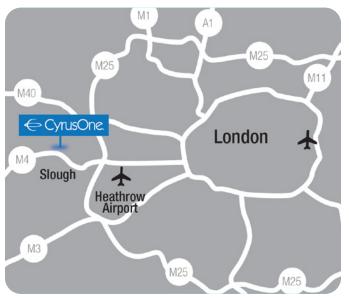
The facility is purpose-built, offering industry leading energy efficiencies, the latest Indirect Adiabitic Cooling technology, uniquely low PUEs, multilayer security and carrier neutrality with diverse routes and Tier III+ level of resilience.





Overview

- Active/Active dual redundant power supplies of 15 MVA
- Fully flexible solutions with IT power of 2,000W/sq m (186W/sq ft) and higher if required
- Highly resilient, concurrently maintainable power and cooling to Tier Ill+
- Carrier neutrality and diverse fiber connectivity
- 4,309 sq m (46,382 sq ft) of technical space within one building on two floors
- Onsite electric vehicle charging points
- Dedicated UPS plant to each data hall
- Ultra-low PUE through the use of Indirect Adiabatic Air Cooling
- Rainwater recovery
- 1,400 mm return air plenum with 4,400 mm clear height in the data hall
- Secure managed delivery bay with 3-tonne goods lifts
- Floor loading 10kN per sq m
- Multilayer industry leading levels of physical and electronic security
- 24/7 year round onsite support



Technical Specifications

POWER

- Mains power supplied via 100%-rated A&B 33 kV incomers diversely routed Active / Active with a capacity of 15 MVA
- All IT power metered and charged as consumed at dedicated MV and LV meters
- N+N power solutions dedicated to each hall, with separate UPS strings
- Minimum N+N UPS with 10-minute battery back-up as standard
- Fully rated N+1 MV back-up generators with 48-hour fuel autonomy at full load, capable of continuous running
- Refueling contracts to ensure timely replacement

COOLING

- N+1 adiabatic cooling plant, dedicated to each hall
- Cooling infrastructure individually managed and linked to BMS
- Dedicated Pressurisation AHU's at N+N to each hall
- Independently regulated temperature and humidity to each space

CONNECTIVITY

- Carrier neutral access via diverse active A+B Meet Me Rooms to multiple telecommunication providers including Zayo, Cogent Communications, euNetworks, CenturyLink.
- BT, Virgin Media, Colt, KCOM, SSE Telecoms, Vodafone, Verizon and GTT telecommunication providers are also within 100 meters of the facility with potential for quick deployment.
- IBM Cloud on-ramp available onsite
- Megaport point of presence available onsite providing network access to services without a cloud on-ramp
- Strict cable management policy

ENERGY EFFICIENCY

- Scalable UPS capable of ECO or sequence operation, with highly efficient UPS modules
- Scalable Indirect Adiabatic Cooling Units with free cooling capacity
- Variable speed drive adiabatic fans
- ASHRAE T9 hall conditions
- Air cooled plant rooms with variable speed fans
- Indirect Adiabatic Cooling Units supply temperature control, with Hot Aisle Containment
- LED lighting with microwave detection
- Rainwater recovery for reduced water usage
- Energy efficiency based control algorithms for optimum energy usage
- Ultra-low PUE through the use of Indirect Adiabatic Cooling

FIRE DETECTION AND SUPPRESSION

Data halls and critical A&B plant rooms are constructed from one hour fire rated enclosures to create separate fire zones

- Three stage fire detection systems into data halls and UPS plant areas
- VESDA (Very Early Smoke Detection Apparatus)
- Fire detection in all rooms and in voids as required
- Gas suppression to data halls and UPS rooms with dedicated bottles
- Double knock approach gas suppression to all areas, single zone activation
- Fire detection and suppression systems interconnected to central BMS

SECURITY

- 3 metre high secure perimeter fence
- External CCTV and Geoquip trembler wire to fence
- Vehicle lock to site entrance with dual gates and rising bollards
- 24/7 year round on-site security located in secure control room
- Extensive CCTV and access control throughout the facility
- Progressive layers of security to restrict access through the site
- Mantraps with biometric readers into data halls can be provided if required

BUILDING & ENERGY MANAGEMENT SYSTEM (BMS & EMS)

- Power and building monitoring systems to provide alarms
- Power surge management
- Dedicated 24/7 year round facilities management team
- 24/7 year round on-site M&E engineers undertaking
 Planned Preventative Maintenance (PPM) programmes
- Real-time monitoring of electrical and mechanical systems

STATE OF THE ART ENGINEERING

- Air-cooled UPS modules
- Sequence and variable mode UPS modules, dedicated to each tenant/hall
- Dedicated main plant for each customer
- Integrated A&B MV Infrastucture and MV generators for increased resilience
- Phasing to allow for subtle changes in each hall/tenant specification/requirements
- Remote intelligence control algorithms to remove reliance on central BMS

REGULATORY COMPLIANCE CERTIFICATION

- ISO 9001: Quality Management
- ISO 14001: Environmental Management
- ISO 45001: Occupational Health and Safety
- ISO 27001: Information Security Management
- SOC2: System and Organization Control
- PCI: Payment Card Data Security Standard

Site Plan

