

Strategic Data Centre Site Profiles

Data Centre Co-Location – London Central

Document details

Version: 1
Last Updated: 12/07/2013

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1. LONDON CENTRAL

1.1 LOCATION

Docklands

1.2 TECHNICAL SPECIFICATIONS

1.2.1 BUILDING AREA

- Total Technical Floor Area – **65,543 m²** (across 13 Levels)

1.2.2 CLASSIFICATION

Designed & Operated to Tier 3 standard.

1.2.3 STRUCTURE

- Steel frame construction covered with concrete floor; metal faced cladding and glazing
- **600mm** raised floor, with antistatic vinyl finish
- Floor capacity weight loading for dead and imposed loads of (Heavy grade flooring) **10kN/ m²** UDL (Uniform Distributed Load)

1.2.4 POWER (MAINS AND EMERGENCY)

- Supplied by **2 x 132kV** incomers to **2 x 60 MVA** transformers
 - Total available power – **46MW**
- Uninterruptible power supply system (UPS)
- Power and cooling systems – supported by up to 37 non-break Rotary Diesel UPS
- On site fuel storage (**4 x 120,000**) to provide minimum capacity of **50hrs** at full load
- **8hr** and **24/7** fuel delivery contracts in place

1.2.5 CONTROLLED ENVIRONMENT

- Chilled water cooling system
 - **N+1** redundancy
- Up to 28 chillers installed at roof level
 - Each providing **1.4MW** of cooling
- Operating Temperature of **18°C -27°C**
- Relative Humidity of **30% - 70%**



1.2.6 DETECTION AND SUPPRESSION SYSTEMS

1.2.6.1 FIRE AND SMOKE

- Gas suppression system (Inergen) to technical and selected landlord areas
- Sprinklers in corridors and selected plant rooms (Water Ingress Protection)
- Dry risers to all floors
- Smoke and gas extraction
- Fire detection system in all areas (smoke and heat)
- Very Early Smoke Detection and Alarm System (VESDA)

1.2.6.2 WATER LEAKAGE DETECTION

- Water leakage detection system
 - Fault identification, time and date alarms
 - Zone activation
 - Located under chilled water pipe work and down flow units within technical areas

1.2.7 BUILDING MANAGEMENT

- Trend 962
- Monitors all critical systems

1.2.8 POWER MANAGEMENT SYSTEM

- Schneider citec system

1.2.9 NETWORKS

- Communication rooms
 - Diverse entries points to each suite
 - Diverse dedicated connection providing access to all the principal metropolitan and international connectivity

1.2.10 SECURITY

- Global Switch Access Control
- Building premises controllers **24/7**
- Access control via proximity card readers
- Intruder alarms to all areas with external infra-red barrier
- Multiple CCTV camera (internal and external)
- **30 day** digital archiving
- On Site Security guards
- Dedicated **24/7** security team
- Secure loading and delivery areas
- Pre-arranged loading and deliveries
- Barrier controlled vehicle access
- Fujitsu Access Control
- Independent Honeywell Access System (WIN-PAK 2.0 Release 4 Software)
- **N-1000** range of door access controller
- Provides alarm and monitoring system

2. GLOSSARY

Acronym or Term	Meaning
BMS	Building Management System
CRAC	Computer Room Air Conditioning
DRUPS	Diesel Rotary UPS
HSSD	High Sensitivity Smoke Detection
kV	Kilo Volt
kW	Kilo Watt
M&E	Mechanical and Electrical
MVA	Mega Volt Amp
MW	Mega Watt
N	The level of redundancy required to support customer load
UDL	Uniform Distributed Load
UPS	Uninterruptable Power Supply
VESDA	Very Early Smoke Detection Apparatus