



Energy efficient. Incredible power. Customisable space.

Full capacity target Power Usage Effectiveness (PUE) 1.1.
11 MVA power. 5,372m²

5nines Hosting opens UK's greenest datacentre on 17 October 2011

Finding a datacentre in the right location that offers the space, power and reliability your business needs can be a tall order. And the task is only getting harder, as the demand on business owners to reduce their carbon footprint grows – along with their need for high intensity computing.

So 5nines Hosting has invested £10m in designing and constructing Building 5000, a 5,372m² datacentre that provides all the power and space you'll ever need in the most energy-efficient building of its type in the UK. Building 5000 is based on a brownfield site in Portsmouth, within easy reach of London. It has a staggering 11 MVA power, room for 20,000 servers, and gives you a direct connection to PEER 1 Hosting's one carrier-class fibre network. We intend to spend another £20m developing the facility over the next few years, so you never have to worry about out-growing us.





Benefits

Minimal energy consumption

Building 5000 is the greenest datacentre in the UK and the first in the world to use the energy - efficient Excool cooling system, earning it a full capacity PUE of just 1.1. The system harnesses the natural cooling effect of air and water, using a super-efficient heat exchange system, low-energy fans and water atomisers. It consumes 95% less power than mechanical systems, accounting for just 4% of the building's total energy consumption. This means we can dedicate more energy (91%) to supporting our IT systems while still running an extremely low-energy building. Its use will significantly reduce your company's carbon consumption – an important consideration, as carbon allowance payments under the CRC Energy Efficiency Scheme become a reality.

Power for intensive computing

With 11 MVA of available power, Building 5000 far exceeds the capacity of the average datacentre. We've designed it specifically for the demands of power-hungry, high-density hosting platforms - like blade servers and cluster servers. You can fit more processing power in less rack space with confidence.

Customisable space

The centre is built using a modular 'pod' system, each with its own discrete electrical room. This gives you total flexibility in your use of space. We can easily fit out an entire pod to your exact specifications. Or you can opt for a private cage, or several racks, drawing down more space as you need it.

Intelligent pricing plans

5nines Hosting offers a choice of commercial models to suit differing business needs. If buying space in the traditional way doesn't give you enough flexibility, you can buy a power allocation for a flat per kW rate. And with racks ranging in power and cooling density from 2kW to 15kW, you can choose how to best use that allocation.

Easy to get to Portsmouth is ideally located for businesses right along the M3 corridor. And, thanks to the opening of the new Hindhead Tunnel on the A3(M), it's just an hour by car from London. Plus, there's plenty of customer parking and a customer lounge and work area. So it's great for colocation customers who need to upgrade or maintain their servers regularly.

Built-in redundancy

Our datacentre in Fleet will remain open - offering 400m² of net technical space to our customers requiring high availability solutions deployed across two datacentres in the UK. This will allow our clients to take advantage of our global load-balanced solution for continuous uptime. Multiple datacentres also offer customers other advantages and can be part of a business continuity or disaster recovery strategy.





Technical Specifications

General building information Generator

- 5,372m²
- Constructed on a 16 hectare estate providing potential for future expansion
- Parking available on site

Structure

- Steel frame and metal deck roof
- Concrete cladding and glazing
- 900mm concrete core anti-static raised floor system, 567kg/tile in datacentre
- 11m slab-to-deck height
- Single story standalone structure

Power

- Main 11kV feeder capacity - 10MW
- Secondary 11kV feeder provisions in place for future development
- Medium and high density power designed for 5-15+ kW per rack UPS
- Current capacity, 3 x 500kVa UPSs (N+1)
- Future capacity, 20 x 500kVa UPSs (N+1)
- Current capacity, 2 x 2MW generators (N+1) • Future capacity, 6 x 2MW generators (N+1)
- Re-fueling agreement(s) in place
- 48 hours of fuel capacity available at full load

Controlled Environment

- Current capacity, 1,297kW (N+1)
- Future capacity, 9,313kW (N+1)
- Excool air economisers as primary cooling (N+1)
- Secondary chilled water based cooling system on site
- “Free Cooling” heat exchangers in place
- Temperature and humidity in the datacentre space maintained to 2011 ASHRAE Thermal Guidelines - temperature is maintained at 18 to 25°C with 40-60% humidity

Fire Detection & Suppression

- Monitored analogue addressable fire detection system in all areas
- Photoelectric, ionisation and heat detection sensors
- Dry-pipe pre-action fire suppression
- Clean agent fire extinguishers deployed throughout the facility



Technical Specifications *continued from previous page*

Telecommunications

- Access to multiple communications providers
- Multiple access building entry points for diverse routing
- Roof space for communication needs
- 24/7 access to wholly-owned NOC to troubleshoot network issues - no reliance on third parties
- PCI compliance
- Redundant diverse 10Gbps routes to London and connection into 5nines Hosting network

Network

- Complete Juniper solution with carrier-grade MX routers at the distribution - high packet processing capability, huge ACL and rate limiting, QOS/COS capability, IPv6 and MPLS, scalable
- Fully redundant switching architecture for true Non Stop Routing (NSR) and In Service Software Upgrade (ISSU)
- Uses Virtual Router Redundancy Protocol (VRRP) for interoperability with other routing vendors
- Juniper EX series switches with Virtual Chassis design - simplified network design, scalability, reliance and redundancy, robust power supply, massive capacity, auto reconfiguration, on board automation, facility to tier up without recabling

Building Management

- Enterprise Building Management System in place, monitoring all aspects of infrastructure
- 24/7 on-site staffing
- Smart hands available on site and remotely for technical assistance and maintenance

Security

- External and internal CCTV cameras tied back to DVR systems
- DVR system tied to backup SAN storage
- Proximity access control system in place utilising access card and biometric authentication
- Mantrap in place utilising ultrasonic technology for single person verification
- Intruder and door tampering alarms in place
- Secure managed loading dock

Green Strategy

- Excool air economisers in place providing a full capacity PUE of 1.1* On-site facilities
- 24/7 access to food and beverages (7am-7pm catering and hospitality, 7pm-7am vending)
- On-site Starbucks coffee shop
- BT Wireless zone
- 10 conference rooms and a 150-seat auditorium



Useful Information about 5nines

How To Find Us

Building 5000 is situated within walking distance of Havant train and bus stations, with excellent train links to London Waterloo and London Victoria.

There is direct access to the A27/M27 leading east to Worthing, Brighton and Eastbourne and west to Portsmouth, Southampton and on towards Bournemouth. Building 5000 is only one mile away from the A3M/

A27 junction, giving easy links to Guildford, Woking and London.

The close proximity to Gatwick and Southampton International Airports and Portsmouth's Continental Ferry Port, makes Building 5000 a convenient location to reach from anywhere.

About 5nines Hosting

5nines Hosting is one of the world's leading IT hosting providers. The company is built on two obsessions: Ping & People.

Ping, represents its commitment to best-in-breed technology, founded on a high performance 10Gb FastFiber Network™ connected by 17 state-of-the-art datacentres, 21 points-of-presence and 10 colocation facilities throughout North America and Europe.

People, represents its commitment to delivering outstanding customer service to its more than 10,000 customers worldwide, backed by a 100 percent uptime guarantee and 24x7x365 FirstCall Support™.

5nines Hosting's portfolio includes Managed Hosting, Dedicated Servers under the ServerBeach brand, Colocation and Cloud Services.

Founded in 1999, the company is headquartered in Vancouver, Canada, with European operations headquartered in Southampton, UK.

5nines Hosting shares are traded on the TSX under the symbol PIX.

For more information visit: www.5nines.it.

Contact Us Today

Finding out more about how 5nines Hosting can benefit your business is easy:

- Call us on (01527) 570535 or go to www.5nines.it.



Building 5000, Langstone Technology Park Langstone Road, Havant, P09 1SA

