



Datum Datacentres provides leading-edge carrier and cloud neutral co-location data centres to enterprise and service providers. As part of the Attenda IT Services group, delivering always-on availability, robust security and enterprise class service is hard wired into our operations. Our data centres are trusted as secure environments for content, data and business critical IT to connect with a neutral choice of networks and cloud service providers.

**In designing our data centres, power considerations are paramount**

Our core focus is to provide an optimised platform for our Clients, which can evolve as their requirements change.

A 100% availability SLA means non-stop power delivery, so Datum starts from the ground up in providing a fully dual path (2N) power infrastructure. Our local electrical utility company provides dual high capacity HV connections. Onsite the electrical design provides a 2N level of resilience down to IT rack level, with no single points of failure, ensuring that our facilities are concurrently maintainable.

The mains infrastructure is supported by a 2N standby diesel generator system, providing automatic back up power in case of mains grid failure. Moreover, each generator is supported by a bulk fuel supply sized to provide 72hrs run time during normal operation.

The 2N UPS system will support all critical IT equipment, and in line with our focus on Environmentally Intelligent design, combines a tried and tested approach in the form of battery based UPS on one path and the more environmentally aware

use of a flywheel UPS system on the other. A separate UPS is also configured to support critical mechanical systems that enable continuous cooling in a power outage. The use of 2 different types of UPS ensures that the power solution is not dependent on one type of technology.

The facility is built to an average power density of 3.5kW per rack, but is capable of supporting up to 30kW per rack. With 6MW of incoming power available, expandable to 7.5MW, we are unlikely to run out of power. This flexibility of power density is matched by the cooling solution which can cool up to 20kW per rack as configured, and up to 30kW with the addition of a supplementary cooling module, without disruption to the live service.

In line with our focus on Environmental Intelligence our priority is of course to minimise the use power. Our advanced cooling solution means that our facilities are extremely efficient, resulting in significant cost saving.

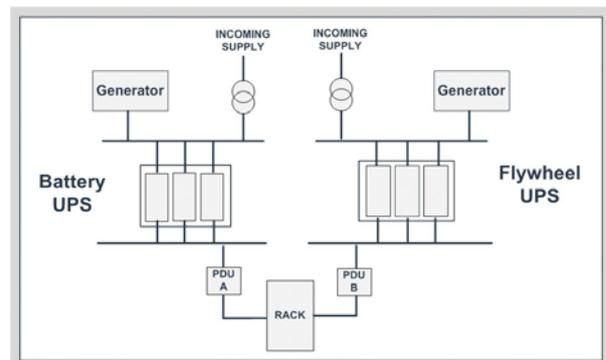
**A network of regional, environmentally intelligent, carrier neutral data centres, delivering highly energy efficient co-location**

**Key Metrics**

- 2N Active/Active power distribution paths
- N+N HV redundant mains power
- Individual components concurrently maintainable
- IT UPS 2N, Standby Generator 2N
- Maximum power density – 30kW per rack

**Main Benefits**

- Active/Active power, ensuring high availability
- 2N power supply from substation to rack level
- 2N back up power supply
- Combination of the tried & tested and Environmentally Intelligent design



***“Power efficiency is critical to our offering. In reducing our carbon footprint we also reduce energy costs, creating savings that we can pass on directly to our Clients.”*** Dominic Phillips, Managing Director