

Client: Ark Continuity

Location: Farnborough

Sector: Data Centre

Project value: £4,500,000

Project: A9 Phase 1 Data Centre Design and Build



## Brief

JCA carried out the rapid deployment of a low PUE data centre, with a 1 MVA power supply serving one data suite along with its associated administration and ancillary support areas. The complete design and construction of the project met the tier III data centre standard, as defined by the Uptime Institute of America's tier classification and performance standard (UTI), supported by TIA 942.

## Action

The design was scalable, to provide a flexible modular 2MVA power/cooling system, designed around a nominal 4 suite solution. A chilled water free cooling approach was installed, this maximises the atmospheric free cooling potential of the site to provide a target annualised PUE at full load of 1.4 – 1.75.

Each data suite has a floor area of 156m<sup>2</sup> and was constructed to a SEAP class 3 (enhanced) design. These were supplied with a nominal 200kVA technical load, which provided a potential to host 60 racks, with an average power demand of 3.3kVA per rack, with no diversity and a maximum of 5kVA at any rack with the appropriate diversity applied to remain within the overall data suite capacity.

All elements of the installation were designed and installed so that they can be isolated to facilitate planned preventative maintenance, without the loss of power or cooling, thereby allowing concurrent maintenance.

The design and installation also included the construction of internal and external plantroom areas and the installation of the associated mechanical, electrical and ancillary services to provide a fully-functional SLA operation.

## The outcome

The project was completed on time and to an accelerated programme to meet the client's tight timeframes for deployment of IT equipment. JCA was again selected by this client to deliver another facility for their growing data centre portfolio.