

# Ultra High Density



VIRTUS enables High Performance Computing through an intelligent design that offers support for High Density as standard

**VIRTUS**  
Data Centres



# Ultra High Density

Increased demand for efficiency, lower cost and lower environmental impact, has led to High Density Computing (HDC) forming a crucial element of IT operations. VIRTUS' data centres are uniquely built for Ultra-High Density deployments of up to 40kW per rack.

VIRTUS' Ultra High Density gives customers the ability to run high performance computing, enabling them to consolidate IT infrastructure, reduce their overall datacentre footprint requirements, increase the efficiency of their computing capability while optimising the cost of their deployment.

The denser the deployment, the more financially beneficial it is for the customer.

Many existing traditional data centres require supplemental cooling equipment to support high density and these costs are ultimately passed onto the customer. This is not true for high density at VIRTUS.

## The VIRTUS Solution

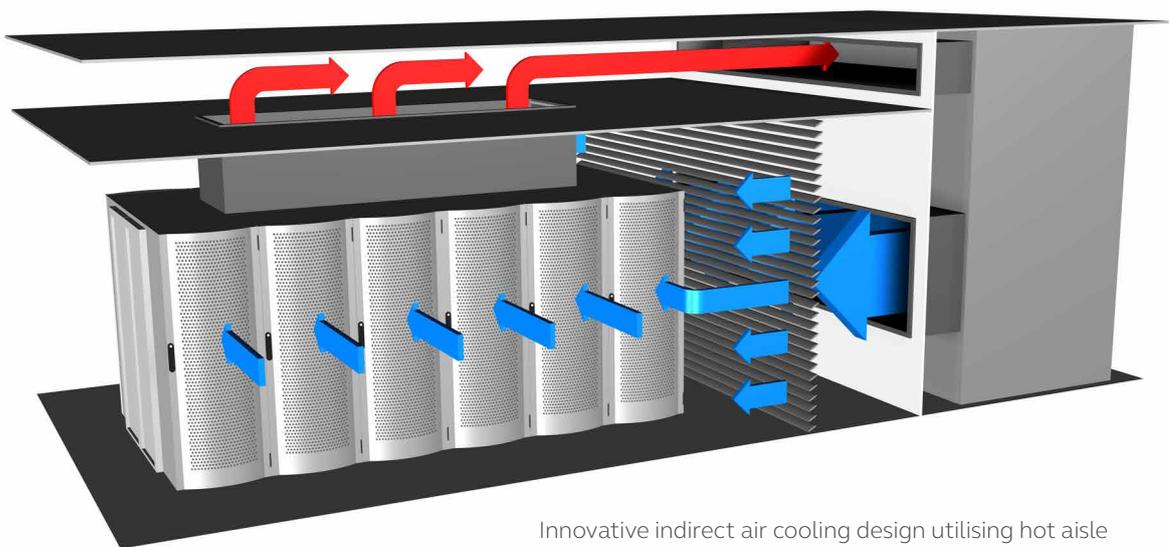
VIRTUS' data centres are uniquely built for the highest density deployments, and customers can easily have high density (10kW-20kW) to ultra-high density (20kW-40kW) in a rack, without the requirement for any additional power or cooling infrastructure. This is possible due to the innovative design of the data centre; a modular design using a flooded room principle unique in the London market place that allows for each rack to operate, as standard, at high densities without requiring addition supplemental cooling equipment or the giving up of additional datacentre footprint. An additional benefit is that different density racks can be located next to each other without issue- negating the requirement for high density zones.

- › Indirect fresh air cooling
- › Hot aisle containment
- › Flooded data hall
- › High Density: 10 - 20 kW
- › Ultra High Density: 20 - 40 kW

VIRTUS' Ultra High Density provides customers with a financial advantage, as the data centre is built to operate at a high density without any supplementary support technology, and therefore the costs per kW reduces with the increasing density within the rack. The denser the computing power can be stacked in a rack, the data centre space can be better optimised and offered to the customer, making a high density deployment significantly more cost effective.

High and Ultra-high density is particularly attractive to some industry sector requirements:

- › Cloud service providers
- › Digital Media workload processing
- › Big data research
- › Core telecommunications network solutions



Innovative indirect air cooling design utilising hot aisle containment as standard offering up to 40KW cooling per rack

