

PowerHive - Server Room in a Box

Sample Challenge

The equipment deployed in this sample is based on a >60 person office with 8-9 servers, switching, patching, APC UPS, KVM and tape back-up.

Solution

The model used in this example is Powerhive 38U - the power consumption is 101 watts and cable access is at the top & bottom rear.
(AR4038iA/AR4038AAR4038i/AR4038A)

Results

The physical capacity for 38 rack spaces. Integrated APC PDU of 12 IEC outlets. A max thermal load of 3.6kW and noise reduction of 18.5 dB, among many others in our comparison listed.

The PowerHive is a soundproofed 'Server Room in a Box' which allows for IT deployment wherever and whenever it is needed, saving space, cost and deployment time.

Here's an example of how the PowerHive can compare to an equivalent white-space:

PowerHive 38U

Server Room/Wiring Closet

INFRASTRUCTURE BUDGET

€4k including delivery

€10k to €20k

TYPICAL FLOOR SPACE

0.9 square metres

9 square metres

EQUIPMENT POWER DRAW

3.6kW (maximum for 38U CX)

3.6kW (limited for comparison)

TYPICAL ELECTRICAL USAGE

Ventilation fans 0.1kW

Aircon 3.6kW (1:1 power to cooling ratio)

FAULT TOLERANCE

Very high: Uses ambient office air (with or without office comfort aircon - not required in large space). Large body of room air - long overheat time in event of building aircon failure. Simple, hot-swappable fan modles which are less complex than aircon, have an average 'life of service' of >8 years.

Very low: Fully reliant on dedicated room aircon. Servers overheat and shut down if it fails. Small body of room air - short overheat time. Restoration requires specialist engineer call-out.

DEPLOYMENT TIMETABLE

2-3 weeks

3 - 6 months

DEPLOYMENT RESOURCES

Available 'off-the-shelf'. Delivered fully-built, ready to use, on user friendly pallet, fits through standard doorways. No red-tape, hassle, plumbing or ducting - just wheel it in to position, plug it in and get going.

Internal resources needed for planning. Landlord approval drawings and timescales. Landlord can be a problem in old buildings. Construction disruption and lead time. Aircon machinery and ducting lead time.

SCALABILITY

Add another PowerHive 38U, 24U, 18U & 12U

Limited to space

PORTABILITY

Take it with you as you grow and move. Change its position in the office easily. Transport your IT without hassle and use the PowerHive to keep your IT portable too.

Sunk cost not recoverable if you move. Landlord requires restoartion of premises to orginal condition which results in new low costs.



7 ways to optimize your small IT spaces



IT spaces in small and medium-sized businesses are often unmonitored, unorganized, unsecured, and space-constrained. PROPERLY DEPLOYED PHYSICAL IT INFRASTRUCTURE IS CRITICAL.

1

Manage & monitor multiple sites

Reduce downtime and avoid environmental damage with a vendor-neutral management system that allows you to view all physical locations through a single pane of glass. Critical alerts, surveillance video, environmental probes, and remotely controllable power distribution units (PDUs) or outlet strips enable you to make quick decisions and manage power remotely, 24/7.

4

Take advantage of field upgrades

Use field-upgradable or buy-up enhancements in your spaces, such as the option of adding remote management to a pre-installed device. This makes new functions more cost-effective without requiring a large capital expense.

2

Protect against power failures

Uninterruptible power supply (UPS) units protect critical equipment and maintain availability during scheduled and unscheduled power outages. Protecting against power surges, potential data loss, and lost revenue from power outages.

5

Start monitoring energy use

Install equipment to constantly monitor energy use regardless of whether or not you are required to report it. This helps you to stay green and make energy-efficient decisions in the future, which can help reduce your OpEx over time.

3

Use scalable power & cooling

Respond to changing IT needs and improve efficiency by using scalable systems to rapidly increase or decrease capacity as needed for power management. By rightsizing, you can lower your capital outlays.

6

Using non-dedicated IT spaces

If you must deploy in a non-dedicated space, use a soundproofed rack. Soundproof, self-contained enclosure solutions include everything you may need for housing reliable IT deployment in any limited space.

7

Deploy pre-installed equipment

Purchase racks and enclosures with pre-installed equipment such as our Energy Management system PowerLink. This ensures that equipment is pre-tested and validated beforehand, saving installation time and confusion. Just plug it and turn it on.

These solutions save time, energy, cut costs, make your IT environment more simple, adaptable, and manageable.