

THE WORLD'S MOST EFFICIENT DATA CENTER

HP POD 240a

Ed Turkel

Manager, WW HPC Marketing
Hyperscale Business Unit



ACCELERATE the HPC Instant-On Enterprise

HP delivers high performance innovation at any scale



Barriers to Innovation and Scale

- Realized system performance and throughput
- Power capacity and cost
- Infrastructure complexity and inflexibility

Get a competitive edge

Scalable Performance

Speed advancements with a converged infrastructure, purpose-built for scale

Maximum Efficiency

Optimize your performance footprint with the world's most efficient systems

Instant-On Agility

Deploy easily, adapt quickly to change & improve quality of service

HP Has Redefined the Data Center

Customers across industry and the globe agree

Breakthrough Impact—From Cloud to Broad Industry Adoption

- Aerospace
- Education
- Telecommunications
- High Tech
- Manufacturing
- Oil and Gas
- Retail
- State and Local Government
- Web 2.0
- High Performance Computing



New Data Center Build

Temporary Capacity

Data Center Expansion

Introducing The World's Most Efficient Data Center

The new HP POD 240a accelerates the move to modular data centers



Compared to monolithic brick and mortar facilities, the POD is...

Lightning Fast

up to 88% faster deployment

Quarter of the Cost

up to 75% capex savings

Near Perfect PUE

up to 95% less facilities energy

HP Innovations

- Maximum density and serviceability
- Adaptive cooling
- Comprehensive management



Cue the video



Delivering Maximum Density and Serviceability

10,000ft² data center in a compact, serviceable package

No Compromise Approach to Modularity and Density

1/10th the space – Up to 4,400 Servers

Heterogeneous, based on industry standards

7X Power Per Rack

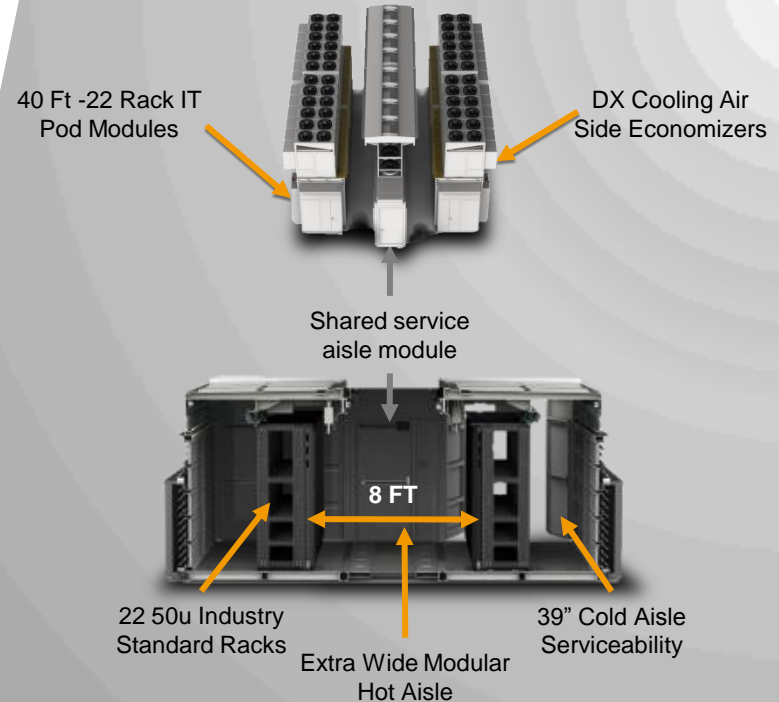
Average 44kW per 50U rack (69kW peak)

Enhanced Serviceability and Simplicity

Closely Coupled Cooling

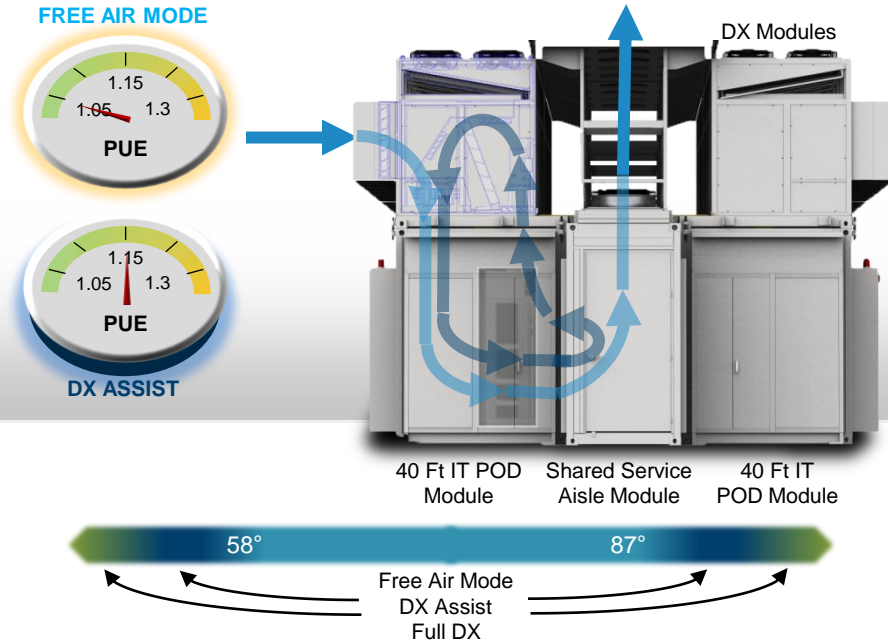
Shared Service Aisle Module

Traditional Data Center Service Model



Adaptive Cooling Intelligently Maximizes Efficiency

Intelligently adjusts cooling technology based on IT load and climate



Free Air – PUE as low as 1.05
default state: 58-87°F

DX Assist – PUE average 1.15
policy based limits

Full DX – PUE of 1.3
full recirculation/dehumidification

...Dial-in efficiency based on
policy and environment

Cooling Parameters are user definable – ASHRAE recommended, ASHRAE allowable, or HP allowable. As inlet temperature approaches the max or min limit, direct exchange units are engaged for additional cooling, or heat containment/dehumidification. Humidity and pressure are additional variables.

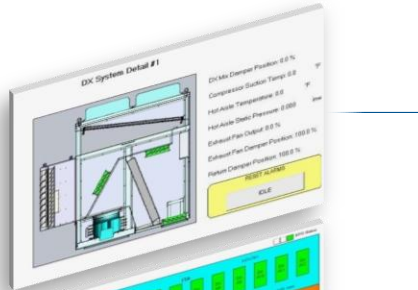


HP POD 240a Environmental Control Suite

Comprehensive management, automation, and integration

Simple, remotely accessible,
programmable, and extensible

Adaptive
Cooling
Control Suite



HP POD ECS
Dashboard



HP Insight
Control



Powerful remote management

Power, cooling, smoke, leak detection

Human Management Interface touch screen
and remote log-in

Policy-based Adaptive Cooling

Dynamic POD fan, HVAC, air flow
control settings

Building Management System API's

Modbus and TCP/IP



Industry leading design, build, deployment & support

HP POD-Works and services complete the solution

HP POD-Works

Planning/
Design



On-Site
Deployment

On -Site
Service
and
Support

Single Vendor

100% From Design to Commissioning

HP Financial Services Available

Redefining Data Center
Economics and Modularity



Large European Manufacturer Moves to Modular IT and Facilities—integrated deployment—simplified refresh



Super Computer Performance for
Rapid Design, Development, Modeling

29

Airbus
France

HP POD - Cluster Platform
3000 BL260c G6, X5675 3.06
GHZ, Infiniband / 2011
Hewlett-Packard

Cores	Rmax	Rpeak	Power
24192	243.90	296.11	643.00

The largest industrial system on
the June 2011 TOP500.

www.top500.org



HP Modular Computing Portfolio

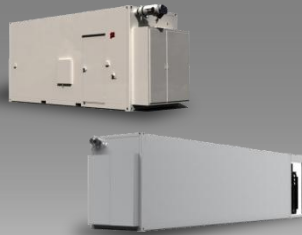
Full Spectrum of Leading Modular Data Center Alternatives



Custom Offerings for
Extreme Scale
Environments

Custom HP PODs

Custom Designed by HP
Air/Water Cooled
Variety of capacity/footprint



Balanced Efficiency and
Modularity

HP POD 20c and 40c

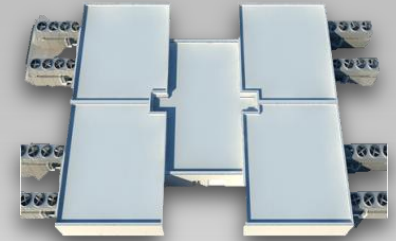
Efficient Power and Cooling
Water cooled
Up to 1,100U, 29kW /Rack



Maximum Efficiency,
Affordability, and Flexibility

HP POD 240a

Optimized efficiency
2,200U, 44kW/Rack avg.
POD Benefits/Data Center
Feel



Flexible, Efficient Modular Brick
and Mortar Alternative

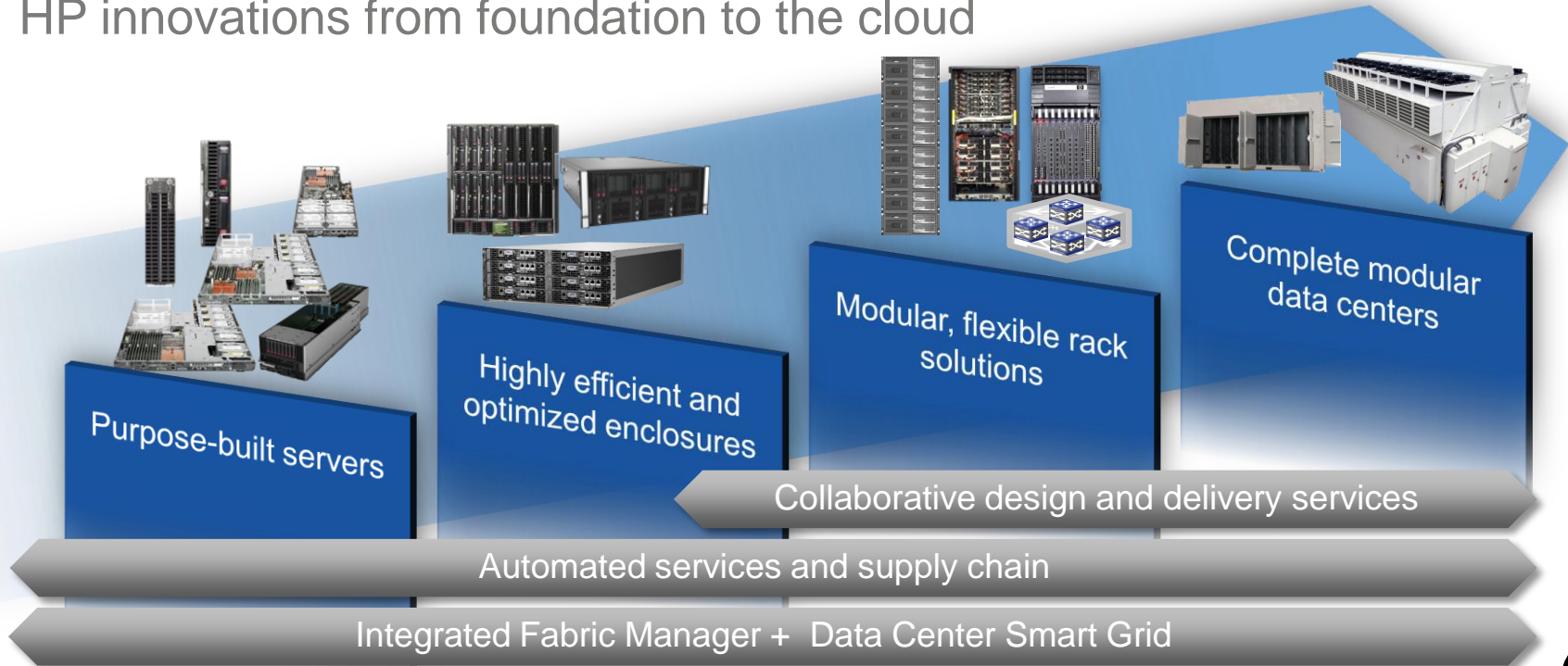
HP Flexible Data Center

Traditional facilities design
Energy efficient
3.6MW capacity facility

43 Million square feet. Delivered and Accelerating

Built on Converged Infrastructure Common Modular Architecture

HP innovations from foundation to the cloud



WWW.HP.COM/GO/POD

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THANK YOU





THE **INSTANT-ON**
ENTERPRISE IS HERE.