

# CPU CLUSTER **in-a-box**



Plug-and-play and intuitive to use, CPU Cluster in-a-box is designed for small and mid-size research groups in Universities & Research Centres, and commercial compute-intensive application environments. Whether you are a researcher or system administrator, CPU CLUSTER in-a-box dramatically simplifies High Performance Computing.

## **Admin Friendly CPU CLUSTER in-a-box – an elegantly simple and powerful cluster system**

We have taken complexity out of the cluster right from the start, allowing you to configure and use it like a simple workstation. View, drill down, point for multiple clusters at once. It is instinctively intuitive even for those without Linux experience.

### **Exclusive benefits:**

- Turnkey pre-installed complete solution
- Easy to use, intuitive cluster management system
- Software porting help packages
- Support across the Asia-Pacific region
- Single point of contact for support for hardware, software and services
- Scalable from Base to Quarter, Half and Full rack configurations
- Proprietary Green design
- Lowest (price + TCO)/performance ratio in APAC
- 20 % academic discount



To learn more, go to [www.novatte.com](http://www.novatte.com)



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## Specifications

### Architecture:

- Separate data, monitoring and management networks
- Redundant power supplies
- Hot-pluggable motherboards, HDDs, power supplies
- Optimized cooling

### Capacity:

- Up to 64 nodes
- 42U rack space

### Compute field:

**CPU:** Dual Intel Xeon X5650 (6-cores) or higher/Dual AMD 6128(8-cores)/Dual AMD 6168 (12 cores) or higher per node  
**Memory:** 24 GB DDR3 ECC per compute node (Intel)/ 32 GB DDR3 ECC per compute node (AMD) or higher  
**OS:** Microsoft® Windows HPC Server 2008 + Windows HPC PACK or Linux OS  
**Storage (optional):** 500Gb per node

### Master node/Storage/License server:

**CPU:** Dual Intel Xeon X5650 (6-cores) or higher  
**Memory:** 24 GB DDR3 ECC Registered DIMM  
**Storage:** 4x2TB HDD (maximum 12x3.5" HDDs)

RAID 0, 1, 5, 6, 10, 50, 60 support  
**OS:** Microsoft® Windows HPC Server 2008 + Windows HPC PACK or Linux OS + CMS

### Networking:

- 1 Gbe switch
- 40Gbps QDR InfiniBand switch

### Dimensions:

**Height:** 1,867 mm (73.5 in.);  
**Width:** 750 mm (29.53 in.);  
**Depth:** 1,010 mm (39.76 in);  
**Weight:** 787 kg (1,735 lbs.)

### Power system:

- Auto 400V, 47-63 Hz 3-phase input power
- 24,950W
- 25,950W

### Warranty:

3 Years

### Support:

HW and OS support package: 1 hr; 10 hrs  
 Application migration package: 1 hr; 10 hrs

AVAILABLE CONFIGURATIONS:	BASE	QUARTER	HALF RACK	FULL RACK
<b>CPU CORES</b>	Intel based: 96 AMD based: 128-192	Intel based: 192 AMD based: 256-384	Intel based: 384 AMD based: 512-768	Intel based: 768 AMD based: 1024-1536
<b>MEMORY</b>	Intel based: 192 GB AMD based: 384 GB	Intel based: 384 GB AMD based: 768 GB	Intel based: 768 GB AMD based: 1536 GB	Intel based: 1536 GB AMD based: 3072 GB
<b>PEAK PERFORMANCE</b>				
Intel Xeon X5650 6C	1.021 Tflops	2.042 Tflops	4.085 Tflops	8.171 Tflops
Intel Xeon X5675 6C	1.175 Tflops	2.350 Tflops	4.700 Tflops	9.400 Tflops
AMD 6128 8C	1.024 Tflops	2.048 Tflops	4.096 Tflops	8.192 Tflops
AMD 6176 12C	1.766 Tflops	3.532 Tflops	7.065 Tflops	14.131 Tflops
<b>POWER CONSUMPTION</b>				
<b>OUTSIDE</b>	4,550W	7,350W	13,200W	24,950W
<b>HEAT DISSIPATION</b>	4,700W	7,650W	13,750W	25,950W

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