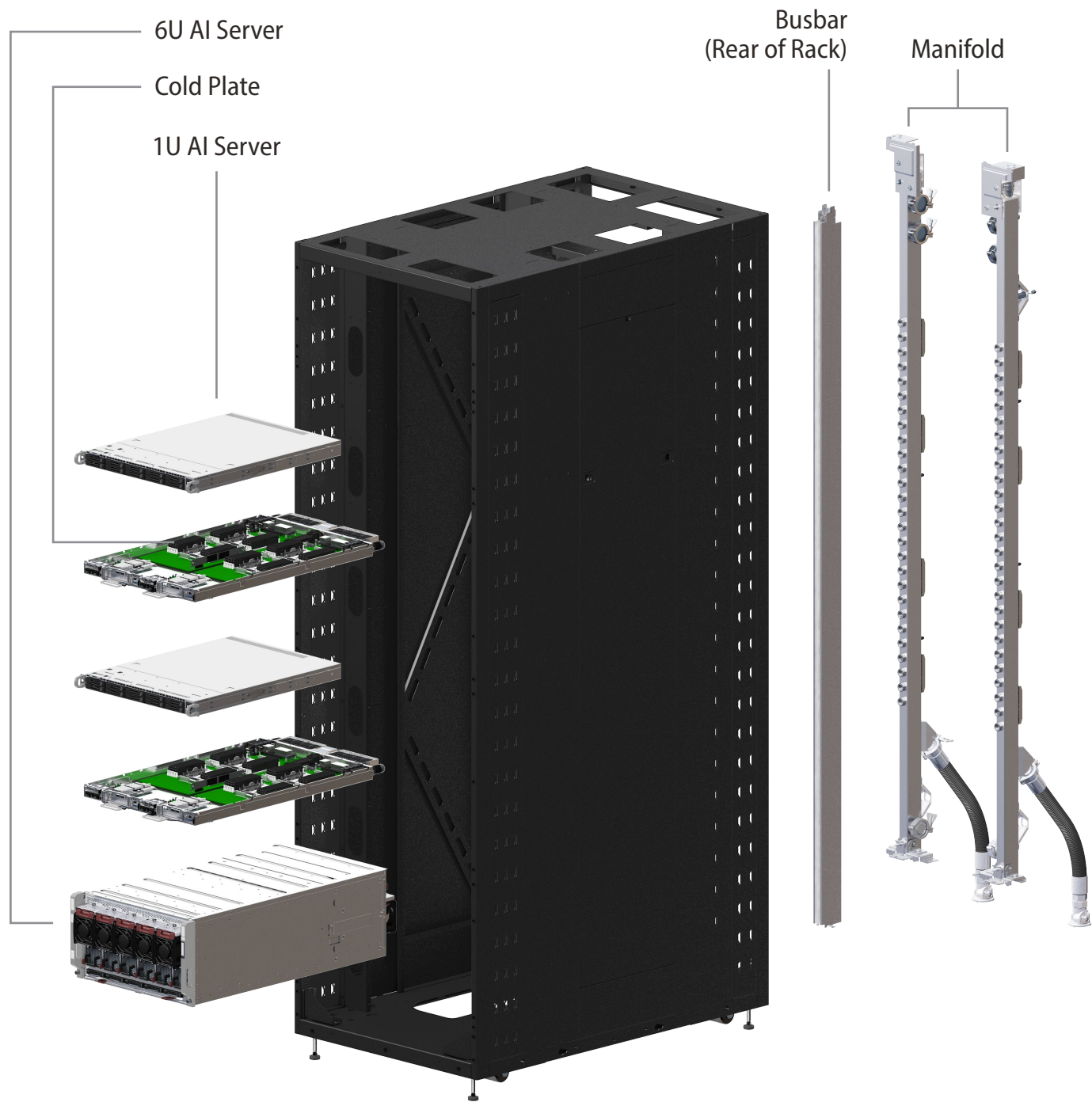




# ABLERACK

*Ablecom Rack  
Integration Solutions*



**Multi-Standard Power Busbar**

Designed to support power densities from 80kW to over 140kW. Our modular busbar system is compatible with V3 power shelf standards but remains adaptable for custom power distribution needs, preventing vendor lock-in.



**Universal Blind-Mate Fluid Interface**

The rear chassis is "Manifold-Ready," featuring adjustable mounting points for Direct-to-Chip (D2C) cooling systems. It is optimized for the high-flow requirements of 72-GPU configurations while remaining compatible with future cooling iterations.



**High-Radix Interconnect Cable Management**

Specially designed lateral cable galleries accommodate the massive scale of NVLink-class copper cabling. Our "Zero-Bend-Radius" routing ensures signal integrity for 1.8TB/s+ interconnects while maintaining easy access for maintenance.

# The Art of AI Infrastructure : Beyond the Standard

AI hardware demands more than just a box; it requires a high-performance environment. With 30 years of deep-rooted expertise in mechanical engineering, we provide the structural integrity and thermal precision necessary for the most dense AI accelerator deployments.





**30% Energy Saving**  
Drastically reduces cooling infrastructure power consumption.

**10~80kW Thermal Capacity**  
Built for high-density AI and HPC rack deployments.

**1.06 Target PUE**  
Industry-leading efficiency for sustainable data centers.

**Non-Invasive Modular Design**  
Fast retrofitting on existing racks; no internal server loops required.



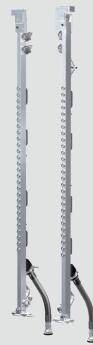
AbleCool™

**High-Reliability Design**  
Redundant, hot-swappable pumps ensure continuous, mission-critical cooling.

**Precision Distribution**  
Optimized manifold design for balanced coolant flow across high-density GPU racks.

**Intelligent Monitoring**  
Real-time leak detection and automated flow control for maximum system safety.

**Seamless Scalability**  
Tool-less installation; fully compatible with ORv3 and modular cooling loops.



CDM

**Ultra-High Density**  
1U chassis supporting up to six 5.5kW hot-swappable rectifiers.

**Peak Power Mastery**  
180% EDPP support (500W to 900W) to handle intense AI processor spikes.

**Smart Telemetry**  
Integrated PMC and ASPEED 2620 BMC for real-time monitoring & predictive maintenance.

**Scalable Parallelism**  
Supports multi-shelf communication for up to 8 power and BBU shelves.



Power Shelf

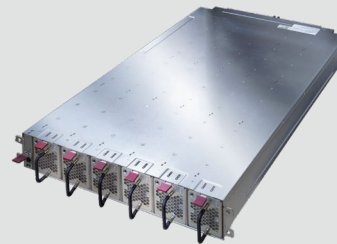
**33kW Rated Backup**  
Supports 90-second discharge; 5+1 redundant, hot-swappable modules.

**Superior Peak Support**  
Engineered for high-intensity spikes: up to 160% load (400  $\mu$ s).

**Instant AC Transition**  
Seamless backup on AC loss with ultra-fast 2ms transition.

**Shelf-to-Shelf Sync**  
Synchronized AC-loss detection across Power Shelves and BBU modules.

**Smart Management**  
Integrated PMC with MODBUS / CANBUS for realtime



BBU Shelf

**Massive Capacity**  
Up to 250kW (In-Rack) / 2MW (In-Row) to handle extreme AI workloads.

**Peak Efficiency**  
1.002 mPUE with 98% heat removal; optimized for sustainable data centers.

**Mission-Critical Reliability**  
1+1 redundant, hot swappable pumps & PSUs for zero-downtime maintenance.

**Smart Integration**  
Touch-panel control with Redfish/SNMP support; ORv3 & MGX compliant.



CDU In-rack

**Max Power Efficiency**  
48V/1400A high-current support, engineered for power-hungry GPU clusters.

**Full ORv3 Compliance**  
Standardized for Open Rack V3, ensuring seamless next-gen hardware integration.

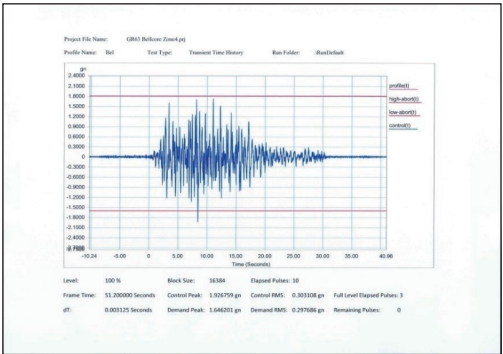
**Cableless & Tool-less**  
Blind-mate design eliminates cable clutter for peak airflow and rapid deployment.

**Flexible Modular Design**  
Streamlined connection across Power Shelves and BBU modules.



Busbar

Feature

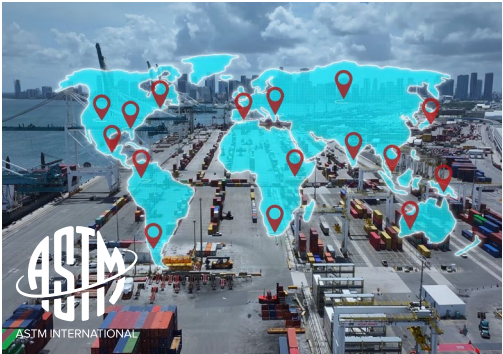


Seismic Resilience

Engineered to survive Magnitude 8.3 seismic events (GR-63-CORE Zone 4), we provide the ultimate physical insurance for your high-value AI assets.

Benefit

our chassis guarantees business continuity by maintaining zero-deflection structural integrity even under extreme dynamic loads.



Certified Transportability

- Engineered for safe global deployment through rigorous ASTM D4169 testing.
- High-intensity testing up to 0.7Grms.
- Passed Rotational Drop (6-inch) and Incline/Side Impact tests.
- Passed 17-degree Tilt test for operational safety.

Benefit

Ensures that massive-scale clusters maintain micron-level interconnect precision even after long-haul logistics.



±0.2mm precision Tolerance

Industry-leading ±0.2mm tolerance control ensures extreme mechanical precision for all structural components.

Benefit

It prevents signal degradation and physical stress on connectors caused by micro-deflections in the chassis, safeguarding the stability of trillion-parameter data exchanges.



Designed and Manufactured in Taiwan

30 years of proven expertise in mechanical design and manufacturing for Tier 1 clients.

Benefit

Made in Taiwan (MIT) represents superior craftsmanship and stable lead times while effectively mitigating geopolitical risks.

Specifications

AbleRack

| Model Name | Rack Height (OU) | Outside Depth (DO) | Inside Depth (DI) | Outside Width | Total Hight (HO) | Inside Hight (HI) |
|------------|------------------|--------------------|-------------------|---------------|------------------|-------------------|
| ORV3-44    | 44 OU            | 1068 mm            | N/A               | 600 mm        | 2240 mm          | 2131.8 mm         |

High Load Capacity Rack (42U / 48U)

| Model Name | Rack Height (RU) | Outside Depth (DO) | Inside Depth (DI) | Outside Width | Total Hight (HO) | Inside Hight (HI) |
|------------|------------------|--------------------|-------------------|---------------|------------------|-------------------|
| FD-60-42U  | 42 RU            | 1100 mm            | 789 mm            | 600 mm        | 2000 mm          | 1891.8 mm         |
|            |                  | 1200 mm            | 889 mm            | 800 mm        |                  |                   |
| FD-80-42U  | 42 RU            | 1100 mm            | 789 mm            | 600 mm        | 2000 mm          | 1891.8 mm         |
|            |                  | 1200 mm            | 889 mm            | 800 mm        |                  |                   |
| FD-60-48U  | 48 RU            | 1100 mm            | 789 mm            | 600 mm        | 2267 mm          | 2158.8 mm         |
|            |                  | 1200 mm            | 889 mm            | 800 mm        |                  |                   |
| FD-80-48U  | 48 RU            | 1100 mm            | 789 mm            | 600 mm        | 2267 mm          | 2158.8 mm         |
|            |                  | 1200 mm            | 889 mm            | 800 mm        |                  |                   |

19" / 23" Rack (41U / 42U)

| Model Name | Rack Height (RU) | Outside Depth (DO) | Inside Depth (DI) | Outside Width | Total Hight (HO) | Inside Hight (HI) |
|------------|------------------|--------------------|-------------------|---------------|------------------|-------------------|
| AHD-35-62  | 35 RU            | 620 mm             | 550 mm            | -             | 1749 mm          | 1556 mm           |
| AHD-35-77  |                  | 770 mm             | 700 mm            | -             |                  |                   |
| AHD-35-90  |                  | 900 mm             | 830 mm            | -             |                  |                   |
| AHD-35-100 |                  | 1000 mm            | 930 mm            | -             |                  |                   |
| AHD-35-110 |                  | 1100 mm            | 1030 mm           | -             |                  |                   |
| AHD-41-62  | 41 RU            | 620 mm             | 550 mm            | -             | 2016 mm          | 1823 mm           |
| AHD-41-77  |                  | 770 mm             | 700 mm            | -             |                  |                   |
| AHD-41-90  |                  | 900 mm             | 830 mm            | -             |                  |                   |
| AHD-41-100 |                  | 1000 mm            | 930 mm            | -             |                  |                   |
| AHD-41-110 |                  | 1100 mm            | 1030 mm           | -             |                  |                   |
| AHD-42-90  | 42 RU            | 900 mm             | 830 mm            | -             | 2060 mm          | 1867 mm           |
| AHD-42-100 |                  | 1000 mm            | 930 mm            | -             |                  |                   |
| AHD-42-110 |                  | 1100 mm            | 1030 mm           | -             |                  |                   |





## Ablecom Technology Inc.

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