

## Keeping pace with technology

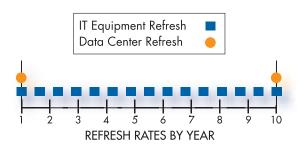
#### **Today's Data Center**

Constantly changing technologies demand solutions that organize and manage the complexity of data center deployment and equipment consolidation. Traditional methods of managing power, airflow and cooling are no longer adequate. Issues surrounding operating systems, increased data storage, processor speeds and multiple equipment form factors have challenged the industry to develop

smarter, more cost-effective solutions. Solutions that are flexible, adaptable, scalable, reconfigurable and secure.

#### **Technology Refresh**

The technology refresh cycle for IT (server and networking) equipment is typically 12-18 months. However, the data center infrastructure cycle is 10-15 years. The physical and technological characteristics of the hardware (size, power, cooling, etc.) would have changed 10-15 times during the lifetime of the data center, underscoring the importance of choosing an open and scalable platform.

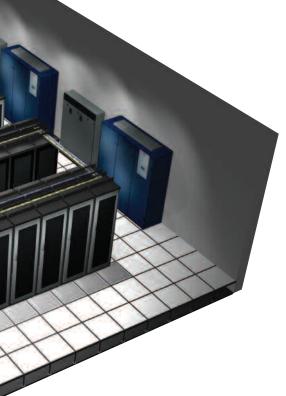


#### Scalable Design

Wright Line's Paramount Enclosure System is one of the most flexible platforms available. Its unique building block design allows for easy reconfiguration; keeping pace with your changing needs. Available in a variety of heights, depths and widths, Paramount offers a full array of accessories to meet the specific storage requirements of virtually all network equipment. Paramount, with its accompanying integrated technologies, provides unmatched reliability to better store, cool, power, manage and secure your mission-critical electronics and servers.

#### paramount enclosure system





#### **STORE**

- · Flexible platform allows for ever-changing requirements and protects your initial investment
- Industry leading weight capacity of up to 2,200 lbs. (998kg)
- Guaranteed compatibility with TIA/EIA\*-310-D standard size equipment
- Customizable to address today's storage challenges
- Full complement of accessories to handle non-rack-mount devices
- · Industry leading cable access and management

#### COOL

- · An industry leading 10kW air-cooling of equipment in just one rack space
- · Advanced thermal options for front and rear doors and side and top panels
- · Intelligent thermal options that extend the life of the IT equipment and infrastructure
- · Superior airflow control and management to, from and within the enclosure

#### **POWER**

- · Basic, metered and managed power solutions to fit today's ever-changing requirements
- Wide variety of custom and standard options allow you to plan for power densities that are increasing and unpredictable
- Uninterruptible Power Supply (UPS) solutions address the growing need for power availability

#### **MANAGE**

- Standard features and optional accessories provide a wide variety of cable management options
- Comprehensive environmental monitoring devices provide advanced detection of emerging problems
- · Predicts failure and provides analysis, allowing you to act rather than react

#### **SECURE**

- Wide variety of devices that minimize damage and unauthorized access while offering various levels of security
- Protection rather than detection



## A flexible enclosure platform

## that enhances speed of deployment and protects your initial investment

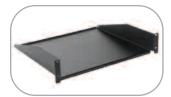


The Paramount platform not only supports an industry leading 2,200 lbs. (998kg) of equipment in a fully welded frame, but it is also designed to adapt to the ever-changing requirements of the data center through a scalable and modular approach, protecting your initial investment. Speed of deployment is essential to any company when considering time to market. Paramount's modularity and building block design ensures quick reconfigurations and minimizes downtime, protecting your initial investment.



#### Non-rack-mount Equipment

Rapidly deployed shelving system accommodates most non-rack-mount equipment.



#### **Shelving**

Extensive offering of fixed and roll-out shelving to accommodate non-rack-mount devices.



#### **Anti-tip Foot**

Optional retractable foot offers additional stability when extending components.

#### **Server Equipment**

A fully welded 24" (610mm) wide enclosure accommodates high density server equipment from tower to blade servers. Optional casters available on all Paramount enclosures.



We guarantee that all 19"TIA/EIA-310-D compliant equipment will physically fit into the Paramount enclosure\*





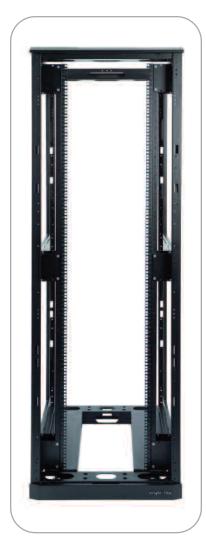


\*This guarantee includes all equipment that complies with the TIA/EIA-310-D standard with the mounting hardware provided by the original equipment manufacturer (OEM).

OEM server rails may be required. Wright Line LLC will not be responsible for equipment that physically fits into the enclosure, but does not comply with TIA/EIA-310-D.







The 30" (762mm) wide Paramount Enclosure System offers unsurpassed cable management features for today's demanding network infrastructure. Featuring unobstructed front, rear and top cable access, Paramount also offers ample cable management along the sides — eliminating cumbersome pass-through holes for your increasing copper and fiber cable loads. Featuring TIA/EIA-568 compliant bend radius provisions, as well as strainfree cable organizers, Paramount minimizes down-time and offers quick reconfiguration and redeployment of equipment.

### **Unobstructed Side Access**

Industry leading unobstructed access along the side eliminates the need for cumbersome pass-through holes. 30" (762mm) only.



**Tool-less Rails** 

Allow fast, simple positioning of equipment rails.

#### **Network Equipment**

Paramount's 30" (762mm) wide enclosure has been specifically designed to accommodate dense cabling with its unobstructed side, front, rear and top access.

	Paramount			Side Cable Chase	
Heights*	40U 77"	44U 84"	51U 96"	40U 77"	44U 84"
Depths (w/doors)					
42" (1956mm)	X	X	X	X	X
37.25" (946mm)	X	X	X	X	X
Widths (w/o sides)					
30" (762mm)	X	X	X		
24" (610mm)	X	X	X		
12" (305mm)	E			X	X
8" (203mm)	1				X

<sup>\*</sup> Add  $^{3}\!/^{4}$ " (19mm) for Paramount with casters. Casters are not available on Side Cable Chase.

## Scalable thermal solutions

## for high density equipment

Smaller and more powerful servers are raising heat densities to unprecedented levels and traditional cooling methods are no longer adequate in today's data centers. Paramount's ability to thermally control these environments using patented solutions is unmatched in the industry.

At Wright Line, we spend a great deal of time with our customers and industry experts to understand today's thermal management challenges and what to expect in the future. Unlike other approaches that simply insert more fans or air units into the enclosure, our modular door

**◀ Tower of Cool Front Door** 

design addresses air volume, air direction and heat exhaust. As your application grows or you consolidate servers, cooling capacity can be increased by modifying the enclosure door. The Paramount enclosure platform offers an industry leading 10kW of heat removal capacity in just one rack space using the patented Tower of Cool (see page 8 for more information).



▼ High Cable-Dense Top

#### COOL



#### Thermal Benefits:

- Thermal solutions designed for front-to-back airflow of servers
- Thermal capacity increases while protecting initial investment
- Spot-cooling within the enclosure
- Fan options are designed to accommodate varying equipment loads
- Ability to cool up to 10kW in just one rack space





#### **Perforated Doors**

A 64% open perforation pattern provides the open area that complies with major OEM/ server vendor requirements.



In-rack Spot Cooling

Addresses specific hot spots within the rack.



**Optional Exhaust** 

Split rear fan doors assist server airflow in highly congested racks.

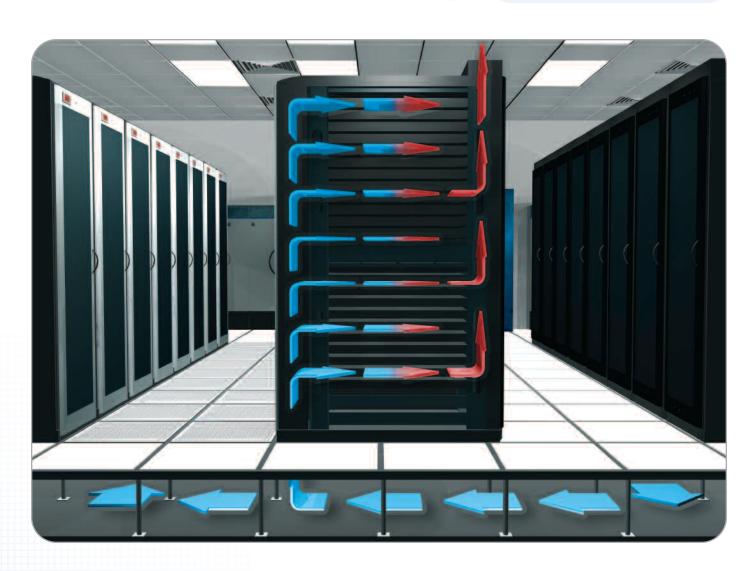
# Scalable cooling solution extends the life of your IT equipment and infrastructure

The patented Paramount Tower of Cool incorporates the building air-conditioning and enclosures into one closed-loop cooling system. This closed-loop system allows for up to 10kW of heat removal within just one rack space, by far one of the best air-cooled solutions on the market.

The unique features of the Tower of Cool include a completely secured enclosure based on the fully welded Paramount frame that supports up to 2,200 lbs. (998kg).

#### Tower of Cool Benefits:

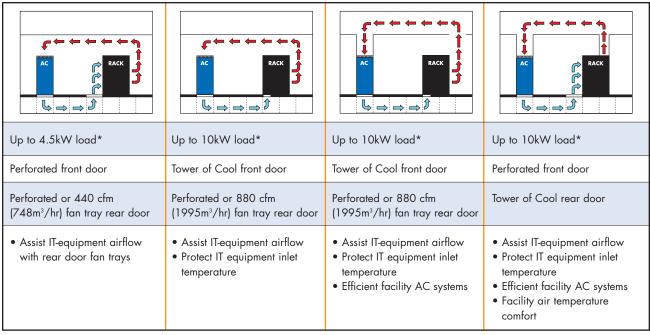
- Thermally control up to 10kW
- Extend the life of IT equipment and infrastructure
- Retrofit existing Paramount enclosures
- Does not interfere with valuable U-space







#### **ASHRAE Accepted Cooling Methodologies**



<sup>\*</sup>kW rack equipment rating is based on a 100cfm (170m³/hr) per kW airflow rate (32° Celsius temperature rise).



#### Koldlok™

Offers a permanent airflow sealing solution in the raised floor, accepting perpetual cabling changes.



#### Tower of Cool Supply Fans

Deliver cold supply air evenly to the front face of all equipment – a total of 900 cfm (1530m³/hr).



## Tower of Cool Exhaust Fans

Extract warm exhaust air from the enclosure - a total of 900 cfm (1530m $^3$ /hr).



#### Tool-less Blanking Panels

Significantly reduce recirculation of hot exhaust air to the equipment inlet.



## Powering increasingly unpredictable equipment densities

Paramount provides superior power and power management capabilities through a basic, metered and managed power strip product offering. What was once a simple task of mounting 15 or 20 Amp power strips has evolved into a calculated strategy to manage power-intensive servers in densely-packed enclosures.

By working closely with the IT community, server manufacturers and power suppliers, our product engineers continually develop new products and enhancements for a wide range of enclosure applications. Paramount is designed to support the most demanding mission-critical power applications, while remaining scalable to accommodate future requirements.

#### **Three-Phase Power Distribution**

An increasing need for more power within the enclosure has prompted a push to three-phase power strips that can deliver up to 17.2kW of power in one cable, rather than running multiple single-phase cables. The less cable run, the lower your installation costs and the less cable clutter, in the rear of the enclosure, blocking important airflow from the server exhausts.



#### **Basic Rack Power**

Simple and reliable rack-optimized power distribution.



#### **Metered Rack Power**

Monitoring the power draw at the rack level helps prevent unexpected branch circuit overloads.



#### Managed Rack Power

Remotely manage and monitor power for mission critical equipment.









#### **Single-Phase**

Provides up to 9.9kW in one power strip.



#### **Three-Phase**

Provides up to 17.2kW in just one power strip.

#### Power Product Selector:

Wright Line's online Power Product Selector allows you to search the most up-to-date information on a database of over 200 different power options that specifically meet your requirements.

www.powerproductselector.com



#### Paramount - Powered by PDI

#### 80kW In-row Power Enclosure

- Dual, primary and secondary power feeds satisfy system redundancy and maintenance requirements. Simply connect to any standard subfeed circuit breaker of a PDU or 208V distribution board.
- Freestanding and self-contained, the In-row Power Enclosure allows quick deployment and provides increased branch circuits on the data center floor.
- Pre-engineered and factory tested, it eliminates costly electrical work while reducing field failures.
- Cut-to-length fully terminated whips offer high flexibility while increasing the speed of deployment for the multiplicity of IT equipment

## Cable Management

## made simple

Paramount takes a unique approach by addressing cable and access management concurrently. From a structural standpoint, Paramount's frame design efficiently accommodates large quantities of cables and provides unmatched enclosure-to-enclosure, raised floor and overhead cable access. This approach is not only crucial to safeguarding cabling, but it is required to maximize airflow and provide clear, easy access to equipment.



## High-Density Cable Organizer

Organize and manage large amounts of cables front-to-rear in compliance with TIA/EIA-568-A bend radiuses (optional).



#### **Integrated Trough**

Allows for overhead cable distribution in an integrated and enclosed trough (standard).





#### **Waterfalls**

Provide the optimal bend radius for CAT 5e/6 and fiber cables as specified in TIA/EIA-568-A (optional).



#### Vertical Cable Manager

Creates a vertical trough in the side channel that allows up to 300 CAT 5e/6 fiber cables (optional).\*





#### Vertical Cable Distribution Spools

Manage surplus power cords or network cables (available in Side Cable Chase only).



Top Cable
Ports

Allow cables to be dropped from overhead (standard).

#### **MANAGE**







#### **Side Cable Chase**

Provides 8" (203mm) or 12" (305mm) plenum for management of network cables, power strips and power cords. Routing cables away from the back of equipment optimizes airflow and reduces heat build-up by allowing air to exhaust from the enclosure (optional).



#### Overhead Cable Management System

Allows users to route cables on top of the enclosure and offers separate trays for power and data (optional).



Active Equipment Cable Managers

Provide bend radius support for patch cables (optional).



**Open Base** 

Offers unsurpassed access of cables through the bottom of the enclosure (standard).

## Infrastructure Management



#### MANAGE

A broad range of products provide streamlined solutions for management of the infrastructure. By combining keyboard, video and mouse (KVM) switching, LCD displays and environmental monitoring products, we offer flexible connectivity, efficient switching and convergence of technologies.



#### **Advance Detection**

Monitoring system provides early detection of emerging environmental problems, minimizing equipment damage and downtime.



#### **User-friendly**

SNMP enabled environmental monitoring system allows for quick deployment to the network.

#### Management Product Features:

- Integrated LCD Display and KVM solutions
- Three-button touchpad or twobutton trackball mouse options
- Local or remote web based user access, IP enabled
- User name and password protection
- Alarm notification prior to system failure via e-mail or SNMP
- Event and statistical data stored for trend mapping or root cause analysis



#### **LCD** Display

Compact IU monitor with keyboard and mouse, also available with 8 or 16-port KVM.



#### **IP-Enabled KVM**

Multi-functional solutions for KVM, Serial, Power and User Management.

## Protecting your investment

Your mission critical business applications are housed on the servers in your data center. How well are you protecting the hardware running your business?

#### **SECURE**



Security remains a growing concern in today's data center environments. After all, the life-blood of your business is running on the equipment that is stored and monitored within your enclosures. In addition to the storage, thermal and cooling issues Paramount solves, it also offers a wide selection of safeguard and security devices that protect the mission-critical equipment behind your enclosure doors.

With security appliances and accessories ranging from standard key locks to electronic access control and graphical management tools, you can rest assured that we're completely focused on the deployment and reliability of your systems.



## HID Proximity Electronic Locking System

Electronic locking system uses HID proximity technology found in most data centers.

#### Lock features and benefits:

- Manage user and supervisor access of personalized codes
- Record and document 750 access events
- LED indicators show status
- User-friendly software available for configuration and management
- Mechanical key options with master key



#### Cages

Ultimate level of security or storage for valuable IT equipment.



#### Mechanical Lock

Keyed lock option offers up to 200 key combinations.



#### Keypad Friction Lock

Self-powered electronic locks provide secure access and audit trails without requiring batteries or line power.

## wright · line

Wright Line, a global leader in the design and manufacture of consoles, enclosures, office and other specialty furniture, has been serving the data center, office, call center, electronic laboratory and high-tech manufacturing environments for more than 70 years. Our innovative designs are manufactured to the highest quality and safety standards.

Also see our full line of accessories and furniture for Data Center environments.



Data Center Accessories Brochure



Profile Consoles Brochure

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