Empowering e-Government with Unified Solutions

PANDUIT®
building a smarter, unified business foundation
Connect. Manage. Automate.
Panduit’s Unified Physical Infrastructure (UPI)

A unified approach to physical and logical systems architecture is imperative for solutions to fully address the need for availability, agility, integration, and security.

Panduit has developed the industry’s most comprehensive and holistic approach to a Unified Physical Infrastructure and can help enterprises align, converge, and optimize critical systems – communication, computing, control, power, and security – to build a smarter, unified business foundation.

Mitigate Risk – Efficient physical infrastructure management enables seamless integration to reduce risks that can occur throughout core systems.

Lower Cost – Panduit physical infrastructure solutions drive financial advantages to reduce energy and occupancy costs, and help secure competitive advantage.

Increase Agility – A high level of integration within the physical infrastructure enables flexibility and improved business agility.

Enhance Sustainability – UPI-based solution offerings enable organizations to meet sustainability goals by driving resource and energy efficiencies across the physical infrastructure.

Higher Demand Higher Expectations

Citizens today want faster, more secure and convenient access to a greater number of government services. In particular, the Departments of Labor, Finance, Education, as well as Health and Environmental agencies continue to see increased demand from the public.

This trend is not isolated to citizens. Government decision makers and military leaders also require prompt and reliable access to volumes of data and statistics from various departments and agencies. However, fragmented networks and outdated legacy systems make information sharing between departments burdensome and in some cases, impossible.

Adding to the complexity, government at all levels is not only being challenged to enhance service, but to ensure that information assurance measures and legislative mandates around energy efficiency and conservation are met or exceeded – many times under challenging budget constraints.

Enhance Service

Manage Budgets

Improve Information Assurance

Increase Sustainability
A Unified Approach to e-Government Challenges

To meet the demands and challenges facing government today, the deployment of e-Government solutions requires significant IT and infrastructure modernization that increases bandwidth for applications, expands access, and enhances availability. This increased reliance on technology makes it critical for government to invest in solutions that facilitate increased business agility, interoperability, and network security.

With extensive knowledge of networking and electrical systems, and an in-depth understanding of the interdependencies between business systems, the Panduit Unified Physical Infrastructure℠ (UPI) approach to the physical layer promotes sound business practices, and energy efficient operations and management. Panduit UPI-based solutions help improve operational efficiencies, reduce unplanned downtime, and increase service and network security levels to fully address the demands of e-Government.

The Panduit Difference

Panduit is a world-class developer and provider of end-to-end solutions for the physical infrastructure that drive operational and financial advantages, delivering the best value for government.

Quality: Panduit solutions meet or surpass rigorous quality management standards to assure compliance with industry requirements, including MIL Specs, UL, EIA/TIA.

Performance: Our products are designed to not only meet industry standards, but to surpass those standards.

Innovation: Our ongoing commitment to innovation is highlighted by our significant annual investment in Research and Development.

Service and Support: With operations in more than 112 countries, including manufacturing and warehousing facilities, distribution, and customer service and support, Panduit has a true global footprint designed to seamlessly manage multi-site projects around the world.
Comprehensive Data Center and Enterprise Solutions for e-Government

Technology, combined with customer collaboration, is the driving force behind solutions development at Panduit. We apply the latest research and development technologies with application expertise and strategic alliances to help government manage risk within the physical infrastructure.

1. **Copper Cabling Systems** (see page 6)
   - Keyed Connectivity
   - Shielded Copper Cabling System
   - QuickNet™ Copper Cabling System

2. **Fiber Optic Cabling Systems** (see page 6)
   - Keyed LC Fiber Optic System
   - OptiCam® Fiber Optic Connectors
   - QuickNet™ Fiber Cabling System

3. **Cabinet Systems** (see page 7)
   - Net-Access™ Cabinets
   - Net-SERV® Cabinets
   - Pre-Configured Physical Infrastructures

4. **Racks and Cable Management** (see page 7)
   - PatchRunner™ High Capacity Vertical Cable Management System
   - NetRunner™ High Capacity Vertical Cable Managers
   - NetManager™ High Capacity Horizontal Cable Managers
   - 2 and 4 Post Open Equipment Racks

visit www.panduit.com
With converged and interoperable technologies, Panduit solutions enable sustainability, and result in reduced capital and operational expenses.

5 StructuredGround™ Grounding System
(see page 8)

6 PanZone® Zone Cabling System
(see page 8)
• In-Ceiling
• Underfloor
• Raised Floor
• Wireless

7 Raceway and Routing Systems
(see page 8 – 9)
• PanWay® Raceway Systems
• FiberRunner® Cable Routing System
• GridRunner™ Underfloor Cable Routing Systems
• Wyr-Grid® Overhead Cable Tray System

8 Network Infrastructure Security
(see page 9)
• Copper and Fiber Lock-In Devices
• Copper and Fiber Blockout Devices
• USB Blockout Devices
Copper Cabling Systems
Complete end-to-end Category 6A, 6 and 5e solutions (jack modules, patch cords, cables, and couplers) are designed to support emerging technologies, including Voice over IP, HD video, Power over Ethernet, and desktop virtualization.

All components are integrated and 100% factory tested, greatly expanding network lifetime and performance.

Keyed Connectivity
The Panduit Keyed Copper Cabling System facilitates secure, modular end-to-end connectivity for all Category 6A, 6, 5e cabling and interconnect elements in the enterprise. Color specific keys with positive and negative keying, mechanically and visually distinguish connections to prevent unintentional insertion into unlike keyed and non-keyed ports.

Shielded Copper Cabling System
Shielded components minimize signal emissions, reducing the possibility of interception of sensitive data. They also protect against Radio Frequency Interference (RFI), commonly emitted from WLANs, cell phones, or radios, which can cause alien crosstalk.

QuickNet™ Copper Cabling System
The Panduit® QuickNet™ Copper Cabling System provides a custom, pre-terminated cabling solution that is fast and simple to install. The system enables quick network deployment, increased reliability, and lower total cost of ownership as compared to field terminated solutions.

Fiber Optic Cabling Systems
Panduit Fiber Optic Systems meet today’s requirements and provide a migration path for tomorrow’s applications. These advanced fiber optic systems for both singlemode and multimode applications provide complete solutions for today’s high data rate Fiber Channel and Ethernet applications, and support future readiness for 40 Gb/s and 100 Gb/s data rates, maximizing physical infrastructure performance, modularity, and scalability.

Keyed LC Fiber Optic System
The Keyed LC Fiber Optic System provides the strictest keying integrity available to prevent unauthorized access and ensure network security. Color specific keys with positive and negative keying, mechanically and visually distinguish connections to prevent unintentional insertion into unlike keyed and non-keyed ports.

OptiCam® Fiber Optic Connectors
OptiCam® Fiber Optic Connectors offer a patented re-termination capability which provides yield rates approaching 100%. The factory pre-polished fiber stub endface eliminates time-consuming filed polishing to reduce installation costs and labor. The innovative OptiCam™ technology features a dual cam design that secures both fiber and buffer in one action to ensure consistent termination results while reducing termination time.

Fiber QuickNet™ System
QuickNet™ Fiber Cabling System delivers performance, scalability and reliability for high-density network applications. This end-to-end pre-terminated solution enables quick deployment of up to 96 fiber connections in a single rack space with superior cable access and management capabilities. The QuickNet™ Fiber Cabling System exceeds 10 Gigabit Ethernet standards and is 100% tested.
Net-Access™ Cabinets

Net-Access™ Switch Cabinets have been designed to properly manage the cabling and thermal requirements for network switches and combine the aesthetics and security of a cabinet with the accessibility of an open rack. They deliver superior cable pathway accessibility and improved thermal management in a fully integrated, electrically bonded cabinet.

Net-SERV® Cabinets

The Net-SERV® Cabinets are engineered to provide a best in class server cabinet solution. The extended depth supports deeper server and Unified Computing Systems (UCS) equipment and provides room in the rear of the cabinet for power outlet unit (POU) management. Cabinets are available in hot aisle/cold aisle, cold aisle containment, or vertical exhaust duct (VED) applications. VED solutions provide optimized cooling management for high-density server deployment and heat loads.

Pre-Configured Physical Infrastructures

Panduit Pre-Configured Physical Infrastructure offers high-density, optimum heat load data center designs for greater thermal efficiencies.

PatchRunner™ High Capacity Vertical Cable Management System

The Panduit Cable Management Rack System manages high density network equipment and patch panels in up to half the number of racks required by traditional cable management systems. Modular design and compatibility with all Panduit networking products provide a comprehensive and aesthetically pleasing infrastructure solution with the flexibility to facilitate system upgrades.

NetRunner™ High Capacity Vertical Cable Manager and NetManager™ Horizontal Cable Manager

This system is an efficient way to manage copper, fiber optic, coax cables and patch cords on any EIA 19” rack. Cable management fingers organize patch cords, simplifying moves, adds, and changes, while the integral bend radius control and “closed” dual hinged cover design protects patch cables in the pathway.

2 and 4 Post Open Equipment Racks

These racks provide a reliable foundation for mounting telecommunication and data center equipment. These racks can be used to manage high performance copper and fiber patch cables. These modular rack systems are compatible with Panduit horizontal and vertical cable managers.
StructuredGround™
Grounding System
The telecommunications grounding and bonding system provides a visually verifiable, dedicated grounding path to maintain system performance, improve network reliability, and protect network equipment and personnel.

PanZone® Zone Cabling System
Zone enclosures serve as a main distribution point for open office architecture applications, wireless deployments and network integration of building automation systems.

Grounding and Bonding
The innovative system is engineered with paint-piercing hardware and pre-terminated jumpers to guarantee quality and speed of installation. A comprehensive offering is available for a variety of grounding applications including: racks, cabinets, enclosures, pathways, access floors, busbars, armored cables, and shielded cabling.

In-Ceiling, Underfloor, Raised Floor, Wireless Zone Enclosures
Our complete line of zone cabling products provide a flexible and scalable platform for data communications and integration of current and emerging technologies. A variety of options are available including, in-ceiling, underfloor, raised floor, wireless, building automation systems, and wall mount consolidation points.

Raceway and Routing Systems
We offer the most complete line of raceway and routing systems for voice, data, video and power cabling. All include a full complement of fittings that are designed to maintain proper bend radius control for protection of cabling.

PanWay® Raceway Systems
Surface raceway products provide maximum flexibility for routing, protecting and concealing high performance copper, voice, video, fiber-optic and electrical wiring within any enterprise environment. Products are tamper resistant, offering increased safety benefits, discouraging unauthorized access, and protecting sensitive cabling from accidental damage, and physical contact with electrical wiring.

FiberRunner® Cable Routing System
The FiberRunner® Cable Routing System consist of channels, fittings and brackets designed to segregate, route and protect fiber optic and high performance copper cabling. Typical applications include data centers and Telco Central Offices where cable is routed from distribution areas to equipment cabinets or racks.
Copper and Fiber Lock-In and Blockout Devices, USB Blockout Devices

The innovative design of the blockout device snaps into jacks/ports and is released with a removal tool, ensuring the safety and security of the network infrastructure. The versatile design of the lock-in device is compatible with most existing patch cords, faceplates, patch panels, IP cameras and other IP devices. It is also compatible with VoIP phones to help prevent unauthorized tampering with connectivity to ensure E911 continuity. Devices are available for copper, fiber and USB applications.

GridRunner™ Underfloor Cable Routing System

This system consists of wire basket pathways designed to route and manage network data and power cabling beneath the raised floor in a data center. It supports high cable capacities, protects cables from damage to improve network performance, and is fully electrically bonded to facilitate proper grounding.

Wyr-Grid® Overhead Cable Tray System

This cable tray system is designed to route and manage copper data cables, fiber optic cables, or power cables. Innovative features provide quick, easy assembly for reduced installation costs and faster deployment.

Raceway and Routing Systems (continued)

Network Infrastructure Security

Network accessories prevent unauthorized access to existing network infrastructure from the data center to the workstation. These devices save time and money associated with network downtime, data security breaches, infrastructure repair, and hardware replacement due to theft.

For more information on these and other product systems such as Work Area Outlets, Cable Ties and Accessories, Identification and Labeling, etc., visit us at www.panduit.com.
Real-World Solutions to Ensure the Success of Our Customers

With a proven reputation for excellence and technology innovation, a robust ecosystem of global partners, and long-term alliances with top industry leaders, Panduit is a valuable, trusted partner offering strategic vision and real-world solutions to ensure the success of our customers.

Innovative Technology Leadership
Panduit is an industry leader in developing innovative technology solutions that meet the rapidly evolving needs of our customers around the world. Our commitment to continued leadership is supported by significant ongoing investment, dedicated manufacturing facilities, strategic technology alliances, and collaborative R&D with other industry leaders.

Global Business & Commitment
Panduit’s ongoing commitment to excellence and our technology alliances with key industry leaders such as Cisco Systems, EMC, Emerson, and IBM, enables our highly skilled and knowledgeable global sales, systems engineering, and technical support teams to engage with critical customer challenges that range from initial problem determination all the way to resolution. Local specialists, trained to global standards and competencies, provide consistent regional support that brings value to local business. Our global value chain, which combines manufacturing, distribution, and service, provides prompt responses to customer-related issues, and streamlines procurement and delivery to any global destination.

Best-In-Class Partner Ecosystem
Panduit employs a consultative approach to identify customer needs and engage appropriate partners in a collaborative fashion to serve our customers. Panduit’s robust ecosystem of architects, consultants, engineers, designers, systems integrators, contractors, and distributors offer a full portfolio of lifecycle services. Our partners are trained on relevant services to Plan & Design, Build & Deploy, and Maintain & Operate to deliver predictable and measurable results.

Worldwide Alliances
Panduit has established long-term strategic alliances with top global industry leaders such as Cisco Systems, EMC, IBM, and Rockwell Automation to develop and integrate innovative, holistic solutions for our customers. We continually invest in relationships and resources for solving our customers’ greatest business challenges.

Eco-Sustainability & Global Citizenship
With a long-standing commitment to environmental excellence, Panduit continually develops and implements solutions designed to protect, replenish, and restore the world in which we live and operate. This commitment is demonstrated by Panduit’s LEED Gold certified new world headquarters and future sustainable building plans using its own revolutionary Unified Physical Infrastructure℠ approach to enable convergence of critical systems for driving energy efficiency.