

# PenTeleData Portraits



## Tierpoint

### Fiber is the core of today's digital infrastructure

But not all fiber is the same. In the age of massive data workloads and compliance requirements, every network decision matters more than ever. Deciding between lit and dark (unlit) fiber determines the levels of control an organization has over their infrastructure, how much flexibility they'll have as their needs change, and the security of their data. PenTeleData's Dark Fiber is a high-capacity network solution for unlimited bandwidth with complete service control. It provides flexibility to support configurations from a single strand to multi-site design.

Dark Fiber refers to optical fiber that the end user lights and manages themselves. PenTeleData provides and maintains the physical infrastructure (the fiber line) with no light and no services until the customer adds their own. The customer has complete control over how the network performs and scales and this is a key advantage. Dark fiber is typically used by organizations that require high bandwidth, security, and long-term flexibility. Typical users include research universities, hospitals, financial institutions, municipal networks, and Cloud or AI service providers who need to move large amounts of data quickly, securely, and with low latency.

### Our Dark Fiber supports The Undisputed Data Center Champ

PenTeleData is proud to provide Dark Fiber for TierPoint, a security-focused, cloud-forward, and data center-strong champion for untangling the hybrid complexity of modern IT. After acquiring a single data center in Dallas in 2010, TierPoint grew both organically and through a series of other acquisitions, including Xand in 2014, Hosted Solutions in 2015, and Cosentry in 2016. Along the way, they expanded their team of first-rate technology professionals, developed a suite of industry-leading cloud and managed services, and built a portfolio of facilities that include 40 world-class data centers across 20 U.S. markets coast-to-coast. Over its history, TierPoint has distinguished itself by fostering a culture of superior service, supporting one of the largest customer bases in the industry, comprised of thousands of companies, from the public to private sectors, from small businesses to Fortune 500 enterprises. Today, TierPoint continues investing in its extensive lineup of services to help these customers achieve their critical business outcomes.

### A Trusted Security Partner

In 2023, TierPoint deployed ultra-high-density solutions (including specialized cabinets) in an eastern Pennsylvania data center to support one of the largest single-user commercial AI/GPU deployments at the time, involving partners focused on machine learning, AI, and related applications.

When asked about what they value about their relationship with PenTeleData, Paul Mazzucco, Chief Information Security Officer at TierPoint, explained, "PenTeleData is our trusted security partner. In the early days of AI, internal testing revealed that we were unintentionally exposing data. To correct this, I asked for two separate fiber lines to segregate and balance load our data. We rely on PenTeleData's Dark Fiber for low latency and robust, reliable connections."



In short, Agentic AI is an Artificial Intelligence system that can accomplish a specific goal with limited supervision. Its machine learning models mimic human decision-making to solve problems in real-time. In a multiagent system, each agent performs a specific task and their efforts are coordinated through AI orchestration. Unlike traditional AI models with predefined constraints requiring human intervention, Agentic AI exhibits autonomy, goal driven behavior, and adaptability. In this case, it was used for crucial real-time security services, both Managed Detection and Response and Endpoint Detection and Response, so AI was doing its job, but since it was traveling on the same fiber strands as other human-regulated data, this crossover created security concerns. The solution was to "surgically" separate the data, so TierPoint asked PenTeleData to physically run new, separate fiber lines. This Dark Fiber infrastructure ensures TierPoint can guarantee the regulatory requirements that many of their clients require.

### A Commitment to the Future

TierPoint operates state-of-the-art facilities across the United States. These sites support high-density colocation designed specifically for AI and GPU-accelerated workloads. PenTeleData Dark Fiber lines provide shared infrastructure to these, especially along the east coast, including data centers in Breinigsville (TekPark), two in Bethlehem, Philadelphia Navy Yard, and Valley Forge. Their facilities are engineered for advanced cooling and scalable power, allowing Graphics Processing Unit (GPU) optimized servers and high-performance applications without compromise. These are enterprise-grade data centers built for the demands of next-generation workloads and backed by industry leading Service Level Agreements (SLAs) for uptime and availability. Mazzucco mentioned, "Some of our clients, especially those who are heavily regulated, rely on our security and compliance stack that travel with them. PenTeleData supports us as we shift and move those workloads."

PenTeleData's Dark Fiber is a high-capacity network solution for unlimited bandwidth with complete service control. In short, it's a reliable, robust, and scalable solution with unmatched security for organizations who wish to remain in full control of their network infrastructure.

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