

# Creating the digital backbone of SunTec's new Technocity headquarters



4,000 m of TeraSPEED® fiber connects the 10-acre campus



4,000 m of LazerSPEED® fiber connects the 10-acre campus



PoE extender adapts to voltage drop supports links up to 3 km

## Executive summary

In September 2017, SunTec Business Solutions embarked on an ambitious journey to build a world-class, 10-acre corporate campus at Technocity IT Park in Pallippuram, Thiruvananthapuram, Kerala, India. The first phase envisioned 310,000 square feet of interconnected, future-ready indoor space with each facility designed to operate seamlessly on a foundation of high-speed, high-availability information and communications technology (ICT) and extra-low voltage (ELV) networks.

In April 2020, SunTec partnered with CommScope to architect and deliver this intelligent infrastructure. Just weeks later, the COVID-19 pandemic disrupted global operations.



Despite the unprecedented challenges, SunTec, CommScope and implementation partner Magnum Networks Support collaborated with precision and resilience to design, deploy and deliver a fully integrated digital backbone—on time and without compromise.

## Project background

India's ascent as a global technology powerhouse is reshaping its urban and economic landscape.

In the southern state of Kerala, Technocity—an ambitious 390- to 500-acre expansion of Technopark in Thiruvananthapuram—aims to fuse IT infrastructure with residential, commercial, hospitality and educational zones. Though still in its early phase, the integrated township already hosts 20–30 companies, signaling steady momentum.

Amid this evolving ecosystem, SunTec Business Solutions has established a significant presence. As a global leader in customer relationship-based revenue management, pricing and billing, SunTec's

investment in a dedicated corporate campus at Technocity underscores its long-term commitment to innovation and growth from its hometown base.

SunTec's move to Technocity began on September 1, 2017, when the foundation stone for the company's 10-acre campus was set in place. Phase 1 of the project consisted of a 206,462-square-foot (19,181 square meters), 17-story software development center that included a Tier 3 data center. The initial phase also called for a clubhouse, swimming pool and cafeteria for employees, a security post and a sewage treatment plant.

By the second half of 2020, construction was far enough along to begin planning and deploying the network infrastructure. After an exhaustive vendor selection and vetting process, SunTec chose CommScope to design and develop a campus-wide structured cabling solution. Magnum Networks Support Pvt. Ltd, a system and network integrator based in Mumbai, was chosen to handle installation.

## Network infrastructure requirements

Network speed and reliability were critical, as was sustainability. The project involved designing, deploying and establishing two networks to connect the entire campus, indoors and outdoors. An ICT network was needed to handle all data, communication, and IT networking. An ELV network would support all device-based systems, including physical security, access control and building automation. Together, the two networks would create a comprehensive and secure infrastructure that could be easily managed, adapted and scaled to meet future needs and provide high-speed, high-reliability performance.

## Challenges

SunTec awarded the contract to CommScope just as the COVID-19 pandemic swept across India. Although Kerala earned praise for its early containment efforts, prolonged lockdowns made in-person collaboration nearly impossible. The SunTec and CommScope project teams shifted their meetings and all collaborative work to video conferencing and online huddles. Exercising their creativity and an abundance of precaution, the teams kept the project on schedule.

The pandemic also posed a variety of technical and logistical challenges. For example, an initial site visit, which is typically part of the design phase, was deemed too risky. Instead, the CommScope planning and design team relied on precise input from SunTec to ensure the final design aligned with the physical

space. During deployment staging and implementation, potential supply chain issues were another concern. This placed added pressure on project management teams from both CommScope and Magnum Networks Support.

"This project had a lot of moving parts—in-building and campus coverage, ELV and ICT networks, infrastructure intelligence, etc.—but nothing we weren't used to. What made it challenging was the pandemic's effects on our project planning, design and deployment processes. Communication between project teams and members was critical."

**Reji B S**  
Manager Sales, Broadband Building & Campus  
CommScope, India

## Project planning and development

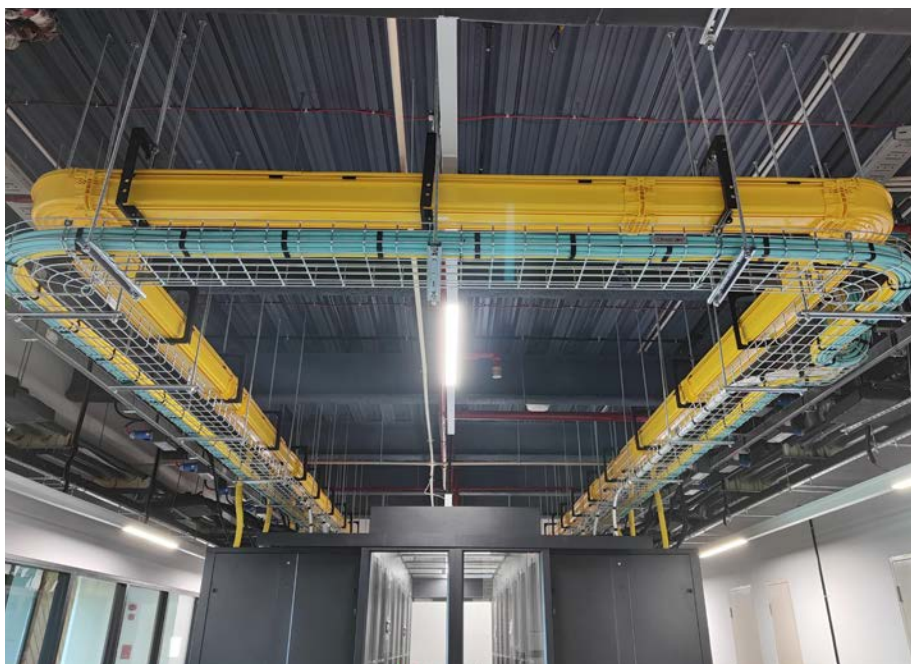
The CommScope project teams began the planning and design phase at the end of 2020. In April 2021, they presented a recommended approach to SunTec that satisfied all project and performance requirements. The design leveraged CommScope SYSTIMAX® indoor fiber and copper cabling and connectivity and SYSTIMAX outdoor powered fiber cabling platform.

### In-building connectivity

All horizontal, in-building connectivity would be provided by CommScope SYSTIMAX GigaSPEED® X10D®, a high-performance Category 6A cabling solution that supports 10-gigabit Ethernet (10 GbE) applications. The copper portion of the network also included GigaSPEED X10D ports (single, dual and quad) and tool-less ceiling connector assemblies (CCAs).

The in-building backbone network specified SYSTIMAX LazrSPEED® OM4 fiber cables, designed for high-density, short-distance environments. Connectivity from the OM4 fiber to the panels would rely on high-density SYSTIMAX 360G2 fiber cartridges with LC connectors and SYSTIMAX 600G2 modular panels.

CommScope was also tasked with providing the intermediate distribution frames, racks, panels and horizontal and vertical cable managers, as well as the cable raceway network for all in-building networks, including the data center.



## Campus and device connectivity

To connect the multiple buildings and facilities across the various floors and across the campus, the project design called for SYSTIMAX TeraSPEED® singlemode (OS2) fiber with underground, in-line splice enclosures. Connecting the 10-acre campus took nearly 4,000 meters of six-, 12- and 48-fiber TeraSPEED cabling.

In addition, the project required an extensive ELV network that could deliver reliable power and data throughout the buildings and facilities and to all parts of the campus. CommScope recommended its SYSTIMAX Powered Fiber Cable System (PFCS) platform. The PFCS platform is a hybrid solution that combines both power and data transmission in a single fiber-optic cable. Using a unique power over Ethernet (PoE) extender, the system automatically senses and adapts to voltage drop over distance, supporting links up to 3 kilometers from the nearest power source.

This would enable SunTec to connect and power any number of perimeter devices, including Wi-Fi® access points, security lighting fixtures and closed-circuit television cameras. The solution's streamlined design simplifies network infrastructure and reduces installation complexity.

## Data center facility

The main building would also house a dedicated data center. During the first phase of the project, this state-of-the-art facility, classified as a Tier 3 data center, would contain 14 racks supported by an efficient in-row cooling system. Additionally, the layout includes provisions for future expansion, with space for 14 more racks.

Among the notable aspects of the data center's design is the focus on sustainability. For example, it is optimized for Power Usage Effectiveness (PUE) to reduce energy waste and carbon emissions, and it features intelligent rack layouts that focus cooling only where needed. Evaporative cooling and humidification systems rely on dynamic monitoring to maintain real-time environmental control. The facility also features NOVEC 1230 clean-agent fire suppression, VESDA early smoke detection, and multi-layered security systems.

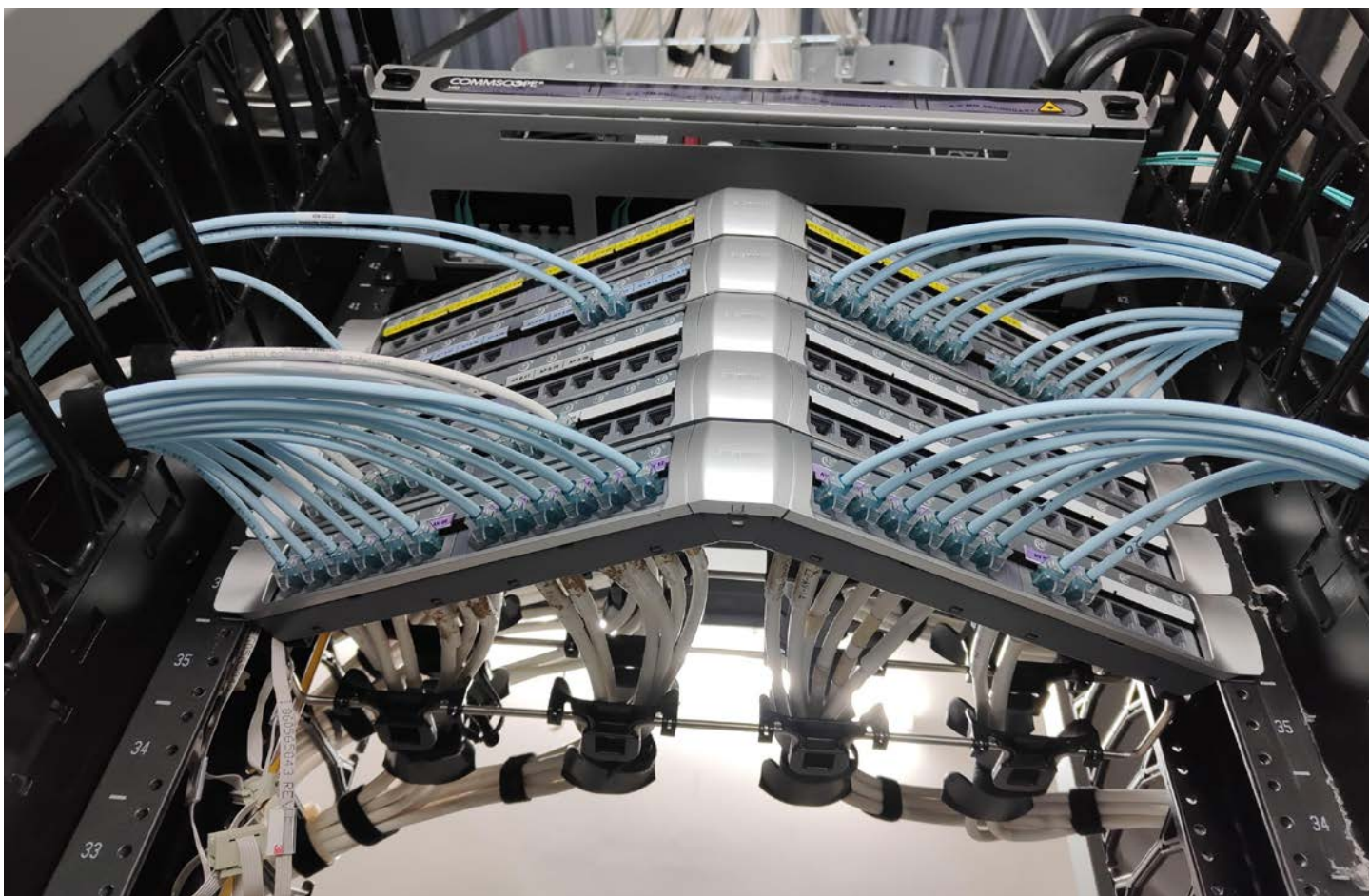
As a result, the various power, cooling, HVAC and security systems would require a vast network of connected devices, monitors and sensors. To support the various data and power needs, CommScope recommended its SYSTIMAX GigaSPEED X10D—a high-performance 10 GbE Cat 6A cabling solution—and SYSTIMAX InstaPATCH® 360 modular preterminated, plug-and-play cable assemblies.

To ensure the structured cabling remains organized and protected, the data center design would feature the CommScope FiberGuide® system for the dedicated routing of optical fiber cables and a wire mesh tray system for routing copper cabling. Both the FiberGuide raceway and wire mesh trays would be positioned above the racks, enabling efficient cable management and ease of maintenance.

## Infrastructure intelligence throughout

To help monitor and manage the expansive infrastructure, the design took advantage of the CommScope SYSTIMAX 360™ iPatch® 1100GS6 Evolve patching solution and imVision®, the company's automated infrastructure management platform.





The two intelligence solutions are designed to work with InstaPATCH 360 cable assemblies and GigaSPEED X10D copper cabling to provide real-time monitoring and management of all physical layer network connections. Once deployed, iPatch and imVision would enable SunTec NetOps teams to track all network connections and assets, providing full visibility and automation and making it easier to manage physical layer changes, troubleshoot network issues, and improve network planning.

## Installation

SunTec reviewed and accepted the CommScope network design plans, and the project shifted to deployment and implementation. As a certified SYSTIMAX installer, Magnum Networks Support has deep experience with all SYSTIMAX solutions specified in the project design.

Meanwhile, the CommScope logistics team began working with suppliers to identify and respond to potential supply chain issues due to the pandemic. Because the company's global supply chain

is regionalized, it is both resilient and redundant, which helped keep product deliveries on schedule and the project on track.

Network installation, testing and turnup of Phase 1 began in January 2022. By April 2023, the first SunTec employees were moving into their new offices. Magnum Networks Support completed Phase 1 installation around January 2023. Today, more than 600 employees work at the new campus.

## What's next?

With Phase 1 of the project now complete, SunTec is evaluating plans for Phase 2, which may include an additional office building and thoughtfully designed spaces to foster collaboration, innovation, and employee well-being. The campus master plan, designed to accommodate over 1,500 people, reflects SunTec's focus on deepening its leadership in software product innovation. The additional space will serve as a catalyst for advanced R&D, engineering excellence, and customer-focused solution development—hallmarks of SunTec's continued growth.

## Message from Nanda Kumar, CEO and Founder, SunTec Business Solutions

### The backbone of brilliance

At SunTec, innovation is not an aspiration. It is our operating model. Our new corporate campus at Technocity is a physical manifestation of that belief, designed not as a symbol of scale, but as a crucible for product innovation. The integrated Tier 3 data center, at the heart of our digital infrastructure, plays a pivotal role in enabling real-time pricing, billing and value chain management orchestration—capabilities that define the Suntec Xelerate platform and differentiate us globally.

This is more than a facility; it's a foundation of our future. The resilient, high-performance network built in partnership with CommScope empowers our teams to experiment, engineer and deploy with confidence. It ensures we can meet the complex needs of our global customers with agility, security and intelligence.

As we continue to shape the future of relationship-based pricing, deal management, enterprise product cataloging, billing and revenue management, this campus will be the

cradle of tomorrow's breakthroughs. Here, we are building the next generation of our AI-powered, industry-agnostic revenue management suite—designed to orchestrate every stage of the revenue value chain, from offer and deal configuration to pricing, billing, taxation, loyalty and e-invoicing. With a relentless focus on eliminating revenue leakage, accelerating monetization, and ensuring auditable compliance, we're enabling enterprises to deliver hyper-personalized experiences at scale—securely, transparently and without disruption.

## Message from Sreekumar Balachandran Global IT Head, Suntec

**"Given the size and complexity of the network infrastructure, our investment in the project and the fact that we were in the middle of a global pandemic, CommScope was the logical choice. Their copper, fiber and powered fiber solution portfolios, along with their engineering expertise and field support, gave us what we needed."**

**Sreekumar Balachandran, Global IT Head, SunTec**

CommScope pushes the boundaries of communications technology with game-changing ideas and ground-breaking discoveries that spark profound human achievement. We collaborate with our customers and partners to design, create and build the world's most advanced networks. It is our passion and commitment to identify the next opportunity and realize a better tomorrow. Discover more at [commscope.com](https://www.commscope.com)

# COMMScope®

[commscope.com](https://www.commscope.com)

Visit our website or contact your local CommScope representative for more information.

© 2025 CommScope, LLC All rights reserved.

CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see <https://www.commscope.com/trademarks>. All product names, trademarks and registered trademarks are property of their respective owners.

CS-120209-EN (10/25)