

Upgraded version of Sri Lankan optical network switch for metropolitan area network



Overview

We provide certified world-class products for all your network infrastructure requirements with a performance warranty.

Key Takeaways

High-performance optical network switches with fiber uplinks and Layer 2/3 management are available in Sri Lanka to support metropolitan area networks, enabling low-latency, high-bandwidth connectivity for smart city and 5G applications. Key Features for MAN Optical Switches

For metropolitan area networks, upgraded optical switches should include:

- High port density and fiber uplinks: Switches like the Edgecore ECS4120-52T offer Gigabit Ethernet access with multiple 10G uplinks, ideal for ISPs and MSOs to deliver high-bandwidth services .
- Layer 2/3 management: Managed switches provide advanced routing, VLAN segmentation, and QoS for efficient traffic handling across urban networks .
- PoE support: Power over Ethernet enables deployment of IP cameras, IoT devices, and access points without separate power lines .

- Low-latency optical connectivity: Integration with hollow-core or multi-core fibers can reduce latency by up to 30%, supporting real-time applications like e-health, online gaming, and smart city services .
- Scalability: Modular switches allow expansion from 1GE to 100GE, accommodating future growth in data traffic .
- Security and reliability: Advanced switches support secure management, redundancy, and compatibility with quantum key distribution for sensitive data transmission .

Leading Providers in Sri Lanka

Several companies provide upgraded optical network switches suitable for MAN deployment:

- DCL Engineering (Pvt) Ltd: Offers fiber and copper switches from 1GE to 100GE, supporting core, distribution, and access layers .
- Networkstore.lk: Supplies Edgecore ECS4120 series switches with 10G uplinks for high-performance access networks .
- Optima Technologies: Provides certified network infrastructure solutions, fiber splicing, and professional training for advanced optical networks .
- Tekxeon Interconnect: Specializes in point-to-point private connections and submarine cable integration, ensuring scalable and secure metropolitan connectivity .

Future-Proof Considerations

Sri Lanka is adopting Space-Division Multiplexing (SDM) and hollow-core fibers to increase bandwidth and reduce latency . Upgraded optical switches compatible with these technologies will ensure:

- High-speed data transmission for cloud services, e-commerce, and digital startups.
- Support for 5G and future 6G networks, enabling smart city infrastructure.
- Energy-efficient and eco-friendly operations, aligning with sustainable development goals . By selecting switches with these capabilities, metropolitan networks in Colombo and other urban centers can achieve robust, scalable, and low-latency connectivity, supporting Sri Lanka's digital economy and smart city initiatives.

Article Content

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When exploring the Network Switch industry in Sri Lanka, several key considerations emerge. The local market is influenced by the

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Sri Lanka Telecom Services

We handle the majority of SLT's OSP network developments, New Connections, and managed services as a subsidiary of Sri Lanka

Managed Switches | TP-Link Sri Lanka

TP-Link offers various managed Gigabit switches, ideal for surveillance, WiFi 6 APs, and centralized cloud management.

Switches

Network Switch from small medium to large-scale industry modes of Network Switch is available in Sri Lanka at SriLankan IT Store

SLT Launches 100G Ultra Speed National Backbone Network.

Sri Lanka Telecom (SLT), the national ICT solutions provider announced that it has launched the country's first ultra-speed National

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

