



VIGI Ensures Security for India's Massive Lok Sabha Elections



▼ END-CUSTOMER GENERAL PROFILE

Name: Lok sabha election kerala 2024

Industry: Government

Location: Election Department
Kerala Legislative Complex
Vikas Bhavan P.O.
Thiruvananthapuram 695 033.

▼ Used Products:

• **VIGI Camera:**

VIGI C320I × 700

VIGI C420I × 250

VIGI C330 × 100

• **VIGI NVR:**

NVR1016H × 10

▼ BACKGROUND

In the 2024 Lok Sabha elections in Kerala, voters will choose their representatives for the 18th Lok Sabha. The election will be a key event in shaping the political landscape of the state, with major parties vying for seats and addressing local issues. The outcome will impact national policies and the representation of Kerala's interests in Parliament.

▼ CHALLENGE

The Election Commission, Kerala turned to TP-Link India, for a reliable surveillance solution, that would resolve the following themes and fulfill the following demands:

Scalability: Managing the deployment of a large number of cameras across various locations.

Network Infrastructure: Ensuring reliable and secure connectivity for live monitoring and data transmission.

Integration: Integrating with existing systems and ensuring compatibility with different types of hardware and software.

Power Supply: Providing a consistent power supply to all camera locations, especially in remote areas.

Storage: Managing large volumes of video data and ensuring its availability for review and analysis.

Geographical Diversity: Handling diverse terrains and environments, from urban to rural areas.

Time Constraints: Completing the installation within a tight timeframe leading up to the election.

Coordination: Coordinating with multiple stakeholders, including election officials, local authorities, and on-ground teams.

Maintenance: Setting up a system for quick troubleshooting and maintenance during the election period.

Cybersecurity: Protecting the camera network from cyber threats and unauthorized access.

Physical Security: Preventing tampering or damage to the cameras in volatile areas.

Data Privacy: Ensuring the privacy and security of the recorded footage.

▼ SOLUTION

TP-Link India, provided a suitable surveillance solution that met all of the demands that were outlined by The Election Commission, Kerala TP-Link's local partner "EC technologies", based in Kochi, implemented the total project along with business critical Pre-Sales & After-Sales support, by the Mumbai TP-Link office.

- **Modular Deployment Strategy:** Implemented a phased deployment plan, segmenting the installation into manageable sections based on geography and priority.
- **Cloud-Based Management:** Used a cloud-based management system to handle camera configurations and updates remotely.
- **Redundant Network Design:** Established a redundant network infrastructure with backup connections to ensure continuous operation even in case of primary network failure.
- **High-Speed Connectivity:** Utilized high-speed internet services and secured VPNs to ensure fast and secure data transmission.
- **Standardized Protocols:** Used standardized communication protocols like ONVIF for interoperability.
- **Custom Middleware:** Developed custom middleware to bridge any compatibility gaps between different systems and devices.
- **Distributed Storage:** Implemented a distributed storage solution with local storage for immediate access and cloud storage for long-term retention.
- **Compression Techniques:** Used advanced video compression techniques to optimize storage without compromising video quality.
- **Customized Solutions:** Designed camera installations tailored to specific environmental conditions, using weatherproof and rugged cameras for harsh environments.
- **Local Partnerships:** Partnered with local contractors for region-specific expertise and faster deployment.
- **Efficient Project Management:** Utilized project management software to monitor progress and address bottlenecks swiftly.
- **Pre-Deployment Surveys:** Conducted pre-deployment surveys to identify potential issues and plan installations more effectively.



The Solution Topology of Lok Sabha Elections in Kerala
For distributed network

▼ BUSINESS RESULTS

The Election Commission, Kerala has expressed intense satisfaction for their implemented solution. The VIGI solution, provided the reliable and proper network performance that they needed. Classic network demands such as:

- **Enhanced Monitoring:** The deployment of 1050 cameras across polling stations ensured comprehensive monitoring, deterring potential fraudulent activities and maintaining the integrity of the election process.
- **Real-Time Surveillance:** Live monitoring capabilities allowed for immediate response to any irregularities, ensuring a smooth and secure election process.
- **Streamlined Coordination:** The centralized communication platform and dedicated liaison teams facilitated efficient coordination among various stakeholders, reducing delays and misunderstandings.
- **Quick Issue Resolution:** The 24/7 support team and remote diagnostic tools enabled swift troubleshooting, minimizing downtime and ensuring continuous operation of the camera network.
- **Optimized Deployment:** The modular deployment strategy and local partnerships reduced logistical costs and expedited the installation process.
- **Energy Efficiency:** The use of solar-powered units and battery backups lowered energy costs and ensured a reliable power supply, even in remote areas.
- **Effective Data Storage:** The distributed storage solution and video compression techniques optimized storage usage, reducing costs associated with data management.
- **Robust Cybersecurity Measures:** Encryption, firewalls, and regular security audits protected the camera network from cyber threats, safeguarding sensitive election data.
- **Positive Public Perception:** Public awareness campaigns and the implementation of feedback mechanisms helped build trust among citizens, demonstrating the transparency and security of the election process.
- **Regulatory Adherence:** The project adhered to all legal and regulatory requirements, ensuring compliance and avoiding potential legal issues.



▼ Related Recommended Products



VIGI C420I



VIGI C330



VIGI C320I



VIGI NVR1016H

“We have successfully used the VIGI series cameras, and I must say, they have exceeded our expectations in terms of image quality, durability, and advanced features like AI-driven detection. The seamless integration with the NVR1016H has made managing large-scale monitoring much easier.

The products have proven to be reliable and highly efficient in real-world scenarios, and we are very pleased with their performance. We look forward to continuing our partnership on future projects.”

— — Sanjay Sanal, CEO of EC Smart Automations Pvt Ltd