

CHARGER 06

Listen For The
Click When Connecting

- Click - Ready to Charge
- No Click - Not Ready to Charge

How AI Surveillance Can Prevent Theft and Maximize Uptime for EV Charging Station Operators

Overview

As EV charging infrastructure expands, operators are facing rising threats of **cable theft and vandalism** - each incident potentially costing thousands of dollars and jeopardizing customer loyalty. IPTECHVIEW, a leader in AI-enabled Video Surveillance-as-a-Service (VSaaS), has developed a tailored solution for EV charging networks, based on its expertise protecting high-value infrastructure in other sectors.

This use case is built from **direct interviews with operators, industry research, and cost modeling** - demonstrating how proactive AI video supervision could deliver a strong return on investment.

The Challenge

Recent insights from EV station operators and maintenance teams highlight:

- Thieves often steal **multiple cables per incident** - with 8 cables per event now becoming typical.
- Each cable can cost **around \$1,000 to replace**, excluding labor and downtime costs.
- Current camera systems **record but do not prevent** theft or alert personnel in real-time.
- Downtime not only hurts revenue - it **erodes customer trust** and station reliability.

Operators need an intelligent solution that can **detect suspicious behavior before theft happens** and **alert responders instantly**.

The IPTECHVIEW Solution

IPTECHVIEW has designed a video intelligence solution specifically suited for EV stations:

- **Facial Recognition & License Plate Detection** – Detect suspicious visitors across locations.
- **LLM-Powered Behavior Analysis** – Identify loitering, cable tampering, and late-night activity.
- **Real-Time Alerts** – Instant SMS/email notifications to operators or security teams.
- **Cloud Access for Review & Response** – Act remotely, monitor multiple sites, and respond faster.

This approach is based on proven deployments in logistics, warehousing, and other asset-heavy environments.

Projected Cost Impact of a Single Theft Incident (8 cables stolen)

Category	Estimated Cost
Cable Replacement (8 x \$1,000)	\$ 8,000
Electrician Labor (6 hours @ \$100/hr)	\$ 600
Lost Charging Revenue (2-day loss)	\$ 2,400
Total Estimated Loss	\$11,000

Estimated Cost of the IPTECHVIEW Solution

AI Surveillance License: \$499/month

Annual Cost: \$5,988/year

Projected Return on Investment

If just **one incident per location per year** is prevented:

Net Annual Savings:

$\$11,000 - \$5,988 = \$5,012$

ROI Calculation:

$(\$5,012 / \$5,988) = 0.84x$ ROI

Year 1 ROI: 84%

However, with **multiple stations** or more than one prevented incident annually, the ROI scales quickly:

3 Prevented Incidents = \$33,000 Savings

ROI = **451%** annually

Net Benefit = **\$27,012/year**

Conclusion

Even a single theft event can cost an EV charging station **\$11,000 or more**. With IPTECHVIEW's AI-enabled VSaaS, operators can **proactively prevent theft, avoid revenue loss, and boost customer satisfaction**. This proven, scalable solution is available now for EV charging networks ready to modernize their infrastructure protection.