Lenovo | intel

Transforming Smart Cities with Edge Computing

Propel smart city operations to unprecedented heights with Lenovo and Intel®

Lenovo and Intel are ushering in faster and more effective data-driven decision-making in smart cities. Powered by the latest Intel processors, Lenovo's ThinkEdge solutions provide real-time data processing and analysis at the edge in a durable, compact, and secure design tailored for smart cities.

The digital infrastructure of smart cities

At the heart of the smart city are interconnected IoT devices, sensors, and systems that generate vast amounts of real-time data from applications ranging from surveillance cameras to traffic monitoring systems, smart streetlights, and connected vehicles.

$312.2B
Is the estimated market value for IoT in smart cities by 2026.[1]

78.4M
Is the projected number of smart camera units deployed by 2027.[2]

30%
Is the estimated energy efficiency improvement within 20 years for cities that run on information.[3]

Edge computing is key to smart city performance

Smart cities are only successful if data can be processed, and acted upon, in real-time. Edge computing quickly and efficiently harnesses the massive amounts of data generated by interconnected devices at the source, speeding transmission and providing critical operational intelligence.

Edge computing processes data closer to where it is created, increasing bandwidth, reducing latency, and facilitating real-time analysis.

Edge computing reduces data in transit, minimizing the risk of exposure and enhancing data privacy.

Edge computing has a distributed architecture, increasing scalability in existing and future smart city applications.

Edge computing has the power to process vast amounts of data in real-time, allowing smart cities to maximize IoT, AI, and machine learning (ML) technologies.

The Rapid Growth of Edge Computing[4]
■ $156B   ■ $16.45B
$16.45B in 2023 $156B in 2030
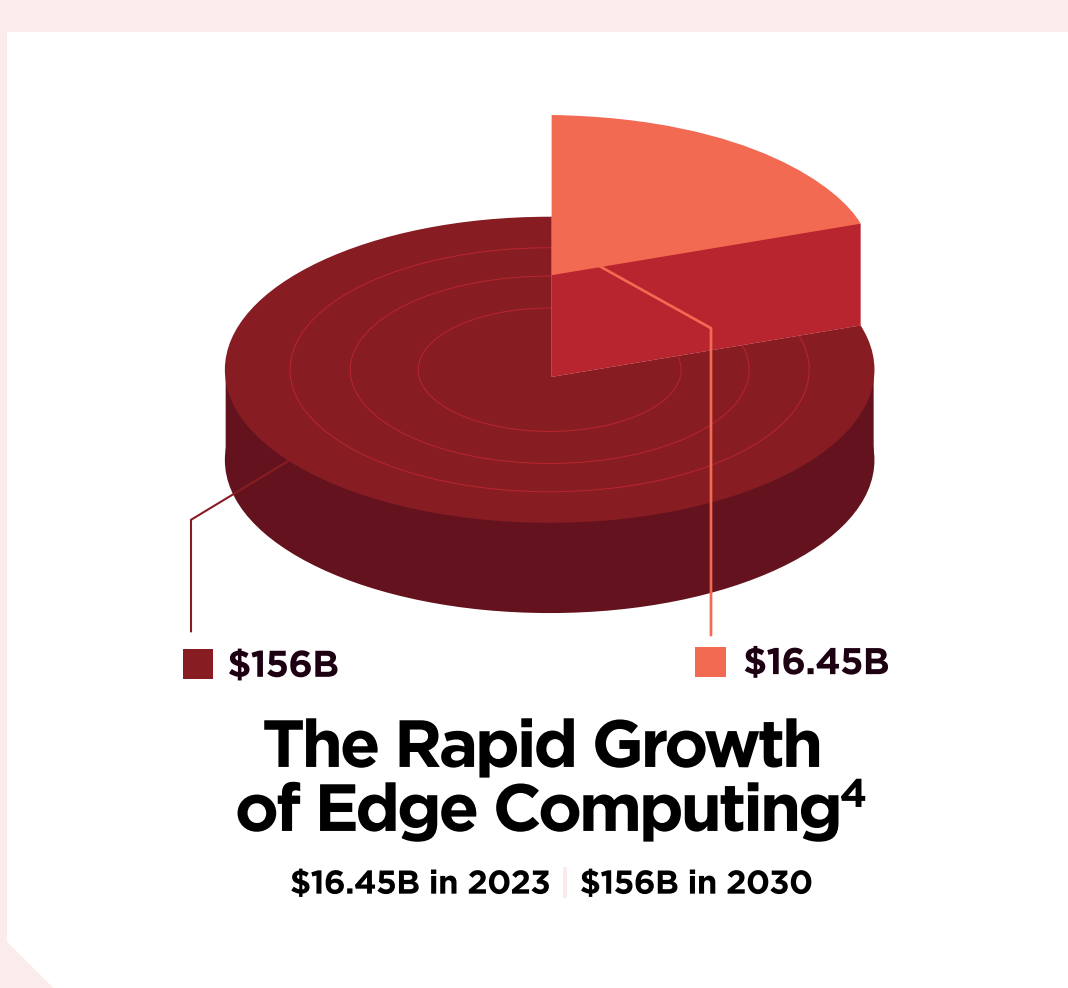
ThinkEdge powers the edge in smart cities

Lenovo and Intel's market-leading edge solutions bring the highest-performing, most secure and reliable compute power to where smart city data is generated for fast insights and faster ROI.

SE10
Intel® Atom®

SE30
Intel® Celeron® or Intel® Core™

SE50
Intel® Core™

SE350 V2
Intel® Xeon® D

SE360 V2
Intel® Xeon® D
Intel® Data Center GPU Flex Series

SE450
Intel® Xeon® Platinum
Intel® Data Center GPU Flex Series

Powerful
With the highest Performance-per-Accelerator (PPA) and most advanced embedded graphics performance.

Versatile
Featuring the broadest Edge portfolio on the market in a wide variety of form factors.

Rugged
Purpose-built to withstand dust, vibration, and the most demanding physical environments from -20° to 65°C.

Secure + Reliable
Rated #1 in security and reliability by ITIC, with built-in physical and software protections that provide ultimate peace of mind.

Quieter
Up to 20% quieter than the competition—a decibel difference between a whisper and a vacuum cleaner—for a more pleasant, more productive work environment.

Scalable
Designed for easy, low-investment upgrades as your business grows, and featuring the latest in wireless technologies to remain compatible with evolving network standards.

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Purpose-built edge devices for diverse smart city environments

Lenovo and Intel's right-sized infrastructure, security solutions, and guided expertise ensure seamless connectivity, rapid decision-making, and optimized energy usage across any smart city location or scenario.

Traffic Management
IoT devices integrated with AI to analyze real-time traffic data and coordinate traffic signals, reducing congestion and optimizing transit efficiency
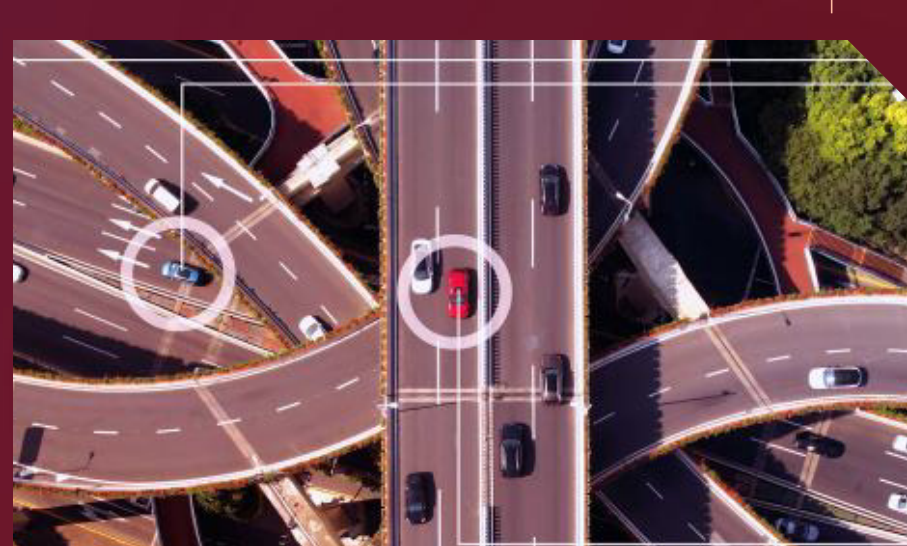
Emergency Response
Connected IoT solutions in first responder vehicles for real-time communications, improved response, and effective utilization of emergency personnel

Public Safety
Connected cameras, sensors, and data analytics in surveillance systems to monitor public spaces, identifying potential threats and decreasing crime

Energy Efficiency
ICT technologies for smart metering, EV charging, and smart buildings to optimize electricity usage and reduce carbon footprint

Transform Your Business with AI at the Edge.
Discover How at Lenovo.com/IntelEdgeAI

[1] Markets and Markets, https://www.marketsandmarkets.com/Market-Reports/iot-smart-cities-market-215714954.html
[2] Transparency Market Research, https://www.transparencymarketresearch.com/smart-camera-system-market.html
[3] Cisco, https://newsroom.cisco.com/c/r/newsroom/en/us/a/y2009/m02/cisco-unveils-intelligent-urbanisation-global-blueprint.html
[4] Grandview Research, https://www.grandviewresearch.com/industry-analysis/edge-computing-market

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