How Safe Is Your Enterprise 5G Network...Really?

Enterprise 5G networks are powering the digital transformation of industrial applications around the world. Globally, 5G is predicted to be a US\$2.2 trillion digital economy by 2034 - one that requires new network technologies and, more importantly, new approaches to securing these networks.

Enterprise 5G spending is predicted to grow at 12.63% CAGR from 2019–2024, with roughly \$1 billion dedicated to security.*





Enterprises leverage 5G as a platform for digital transformation

IoT/M2M



🔊 **41.6**B

devices estimated to be connected (\$)

Edge Intelligence



75%

of enterprise-generated data will be created and processed at the edge by 2025^{\dagger}

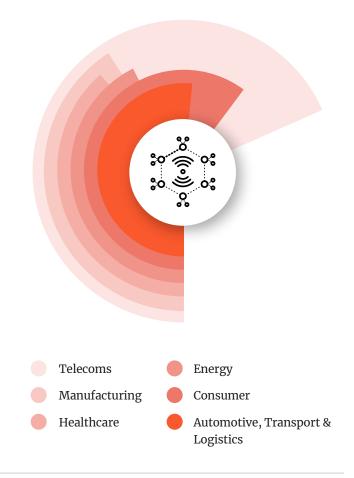
New 5G Services



Up to 13%

boost in gross margins for factory and warehouse operations that fully embrace Industry 4.0, leveraging private cellular networks[†]

5G Readiness[‡]



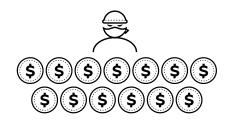
The importance of security



Impact of cryptocurrency mining



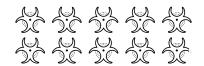
Performance reduction in IoT devices[§]



Rising average breach costs



Annual cost of cybercrime to an organization, a 72% increase in the last five years#



Malware variants on the rise



Malware attacks record in 2019

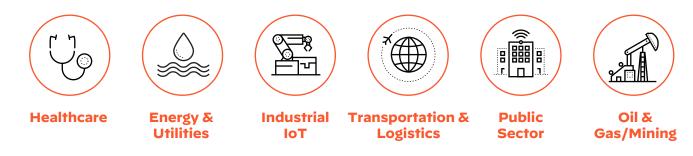


IoT device attack vulnerability



of IoT devices are vulnerable to mediumor high-severity attacks, making IoT the low-hanging fruit for attackers[§]

Who can benefit?



Manufacturing industry concerns



of manufacturers had a data breach from June 2018 to June 2019**

perform security assessments of vendors*



90%

have experienced at least one damaging cyberattack on IT and OT, and 62% have experienced two or more⁺⁺

50%

experienced an attack against OT infrastructure that resulted in downtime for plant and/or operational equipment⁺⁺

23%

<u>ိ</u>ိ၀

experienced an attack they were able to attribute to a nation-state⁺⁺

Utility preparedness for cyberattacks

18% of organizations use AI and big data analysis to monitor operations and recognize threats#

64%

of respondents across the industry say sophisticated attacks are a top challenge#

expect an attack on critical infrastructure in the next **12 months**^{‡‡}

New enterprise 5G trends demand a new approach to security

The Palo Alto Networks difference









Uniquely scan enterprise 5G networks. Secure integrated supply chains to support myriad suppliers and business partners with customizable security permissions and access privileges.

Control Deliver advanced threat

prevention from the cloud.

Ensure IT and OT networks

are protected from

cyberattacks that could harm valuable assets and

disrupt productivity.



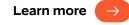
Enforcement

Build a Zero Trust ecosystem for edge clouds and private networks. Leverage security solutions tailored for industrial use cases via a centrally managed platform for consistent security and reduced TCO.

Lifecycle

Improve threat and overall network visibility by illuminating usage patterns and potential security gaps through automated analysis of the evolving threat landscape.

Are you ready for a different approach to secure your enterprise 5G network?



Sources

*<u>"The Mobile Economy," GSMA</u>

""The Growth in Connected IoT Devices Is Expected to Generate 79.4ZB of Data in 2025, According to a New IDC Forecast, "IDC

<u>+"5G Market Set to Boom – But Clarity is Needed, IHS Markit Says," IHS Markit</u>

§"2020 Unit 42 IoT Threat Report," Palo Alto Networks

||"2020 SonicWall Cyber Threat Report," SonicWall

"The Cost of Cybercrime," Accenture and Ponemon Institute

** <u>"50% of Manufacturers Experienced Data Breaches in Past Year," IndustryWeek</u>

++"Cybersecurity in Operational Technology: 7 Insights You Need To Know," Ponemon Institute and Tenable

##"Caught in the Crosshairs: Are Utilities Keeping Up with the Industrial Cyber Threat?" Siemens