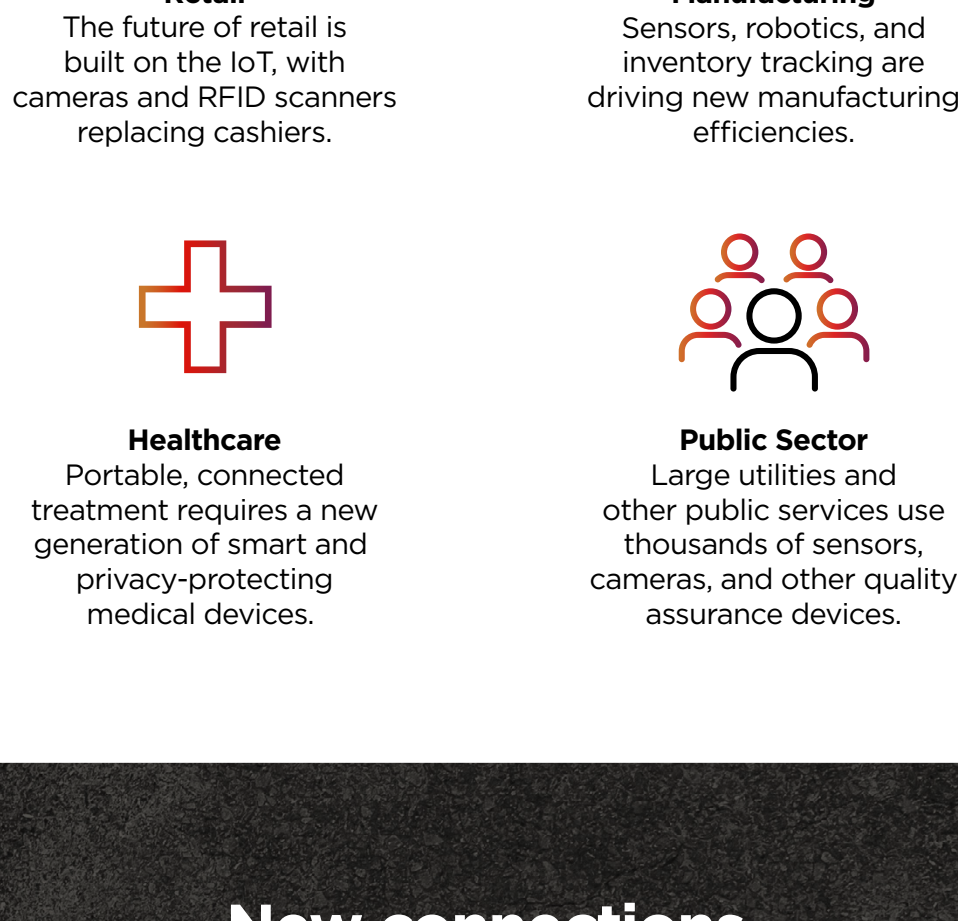# A hacker's playground: Securing the Internet of Things

The Internet of Things is undergoing explosive growth across industries. But new technology creates new security challenges.

Explore below to see how ThinkShield is helping to secure the IoT.

State of IoT

127 new devices connected each second[1]

20 billion IoT devices in use by 2020[2]

5 minutes average time before a new IoT device is attacked[3]

65% of business using IoT devices by 2020[2]

215% increase in IoT malware attacks in 2018[4]

$2 million potential cost of suffering a DDoS attack[5]

Transforming industry

Retail
The future of retail is built on the IoT, with cameras and RFID scanners replacing cashiers.

Manufacturing
Sensors, robotics, and inventory tracking are driving new manufacturing efficiencies.

Healthcare
Portable, connected treatment requires a new generation of smart and privacy-protecting medical devices.

Public Sector
Large utilities and other public services use thousands of sensors, cameras, and other quality assurance devices.

New connections

Sensors
Connected sensors monitor everything from crop fields, to manufacturing lines.

Security
Security cameras, window sensors, and other connected security equipment are often targeted.

Smart workplace
Workplaces are now full of new connected devices, from videoconferencing systems to connected locks and security.

Environments
Everything from thermostats and lightbulbs to smart assistants often lack proper security.
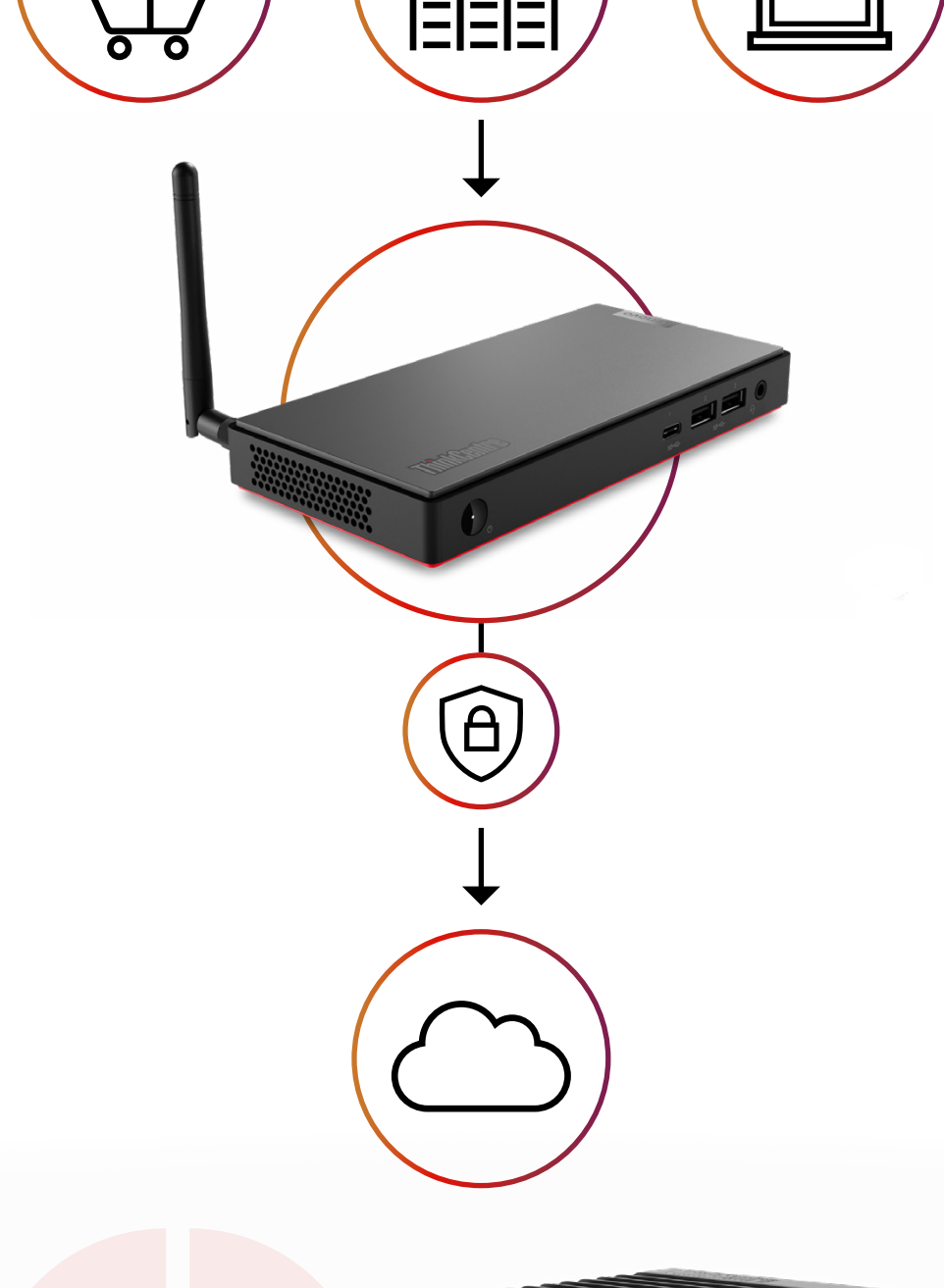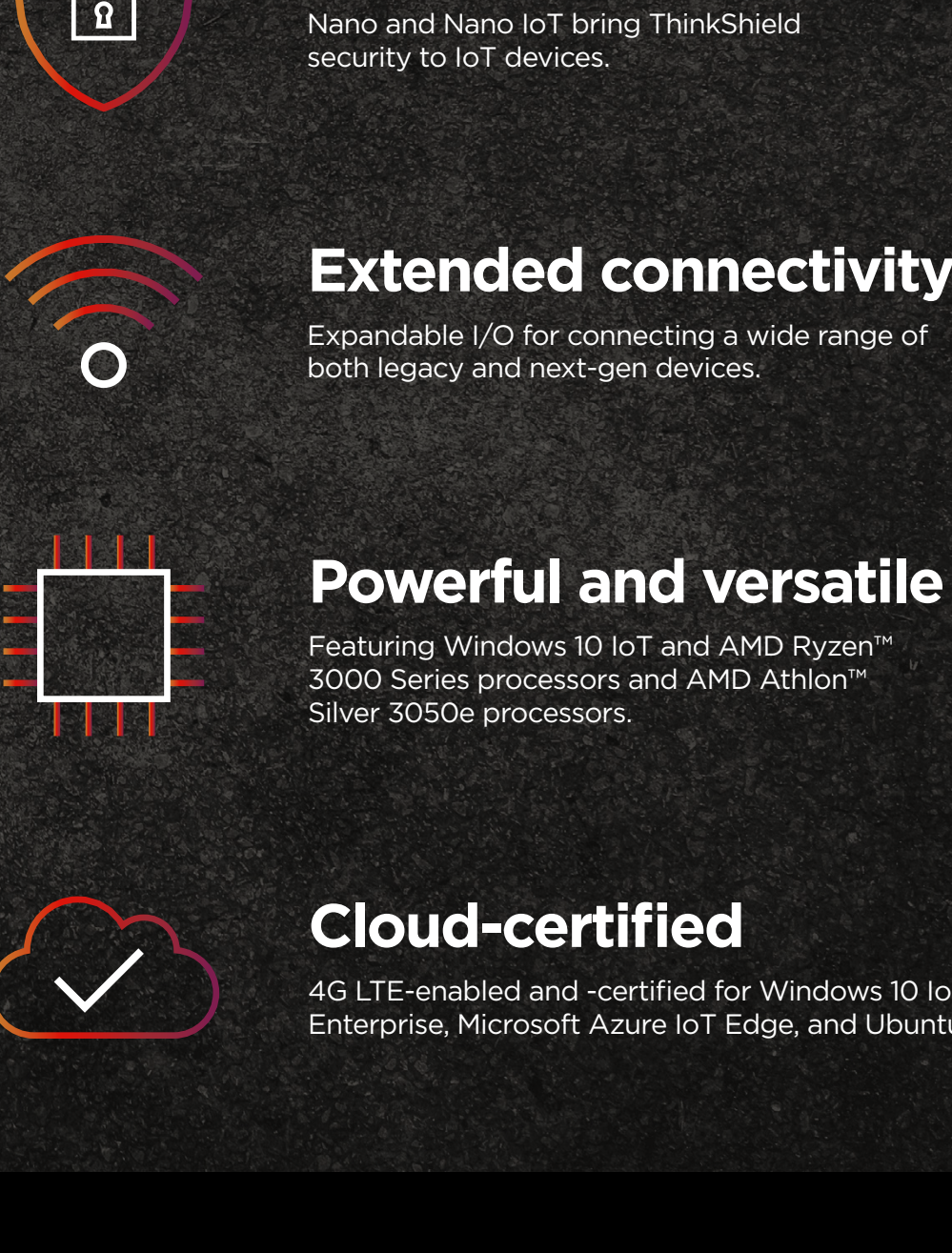
Lenovo ThinkCentre Nano and Nano IoT

ThinkCentre Nano and Nano IoT protect IoT objects against intrusion while also providing an easy platform for device management via ThinkShield. They sit between smart objects and networks, securing data and providing processing power at the edge.

ThinkCentre M75n Nano IoT

Simply secure
Nano and Nano IoT bring ThinkShield security to IoT devices.

Extended connectivity
Expandable I/O for connecting a wide range of both legacy and next-gen devices.

Powerful and versatile
Featuring Windows 10 IoT and AMD Ryzen™ 3000 Series processors and AMD Athlon™ Silver 3050e processors.

Cloud-certified
4G LTE-enabled and -certified for Windows 10 IoT Enterprise, Microsoft Azure IoT Edge, and Ubuntu.

ThinkShield: Smarter security for IoT

ThinkShield is Lenovo's security portfolio of hardware, software, services, and processes — fully customizable solutions to secure your critical data and business technology.

Get the most comprehensive protection with modern Lenovo devices running Windows 10 Pro and protected by AMD Ryzen PRO and AMD Athlon security features.

Learn more at **www.lenovo.com/ThinkShield**.

1. Politico: Introducing the Wireless Cow https://www.politico.com/agenda/story/2015/06/internet-of-things-growth-challenges-000098
2. Gartner Newsroom https://www.gartner.com/en/newsroom/press-releases/2017-02-07-gartner-says-8-billion-connected-things-will-be-in-use-in-2017-up-31-percent-from-2016
3. Gartner Leading the IoT https://www.gartner.com/imagesrv/books/iot/iotEbook_digital.pdf
4. NetScout 2018 H2 Threat Intelligence Report https://www.netscout.com/sites/default/files/2019-02/SECR_001_EN-1901%20-%20NETSCOUT%20Threat%20Intelligence%20Report%20H2%202018.pdf
5. 2019 SonicWall Cyber Threat Report https://www.sonicwall.com/lp/2019-cyber-threat-report-lp/
6. NetScout 2018 H1 Threat Intelligence Report https://www.netscout.com/threatreport

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AMD RYZEN PRO

AMD ATHLON

Smarter technology for all