



## China Sneaking Up in Tech War

China has become a global leader in 5G, sparking fears it will use its expertise in the technology to create a “back door” into U.S. networks to spy on our military, corporate, and government communications.

For that reason, Huawei Technologies, China’s largest supplier of telecom gear, has been blocked by the U.S. government from the American market. Other Western nations have taken similar action.

China is rapidly closing in on the U.S. in the “tech war” and experts warn that if it takes the lead it will pose a threat to the U.S. economy and national security.

Experts fear domination in 5G, as well as in artificial intelligence and quantum communication, will vault the winner into a position of dominance, making this a war the U.S. cannot afford to lose.

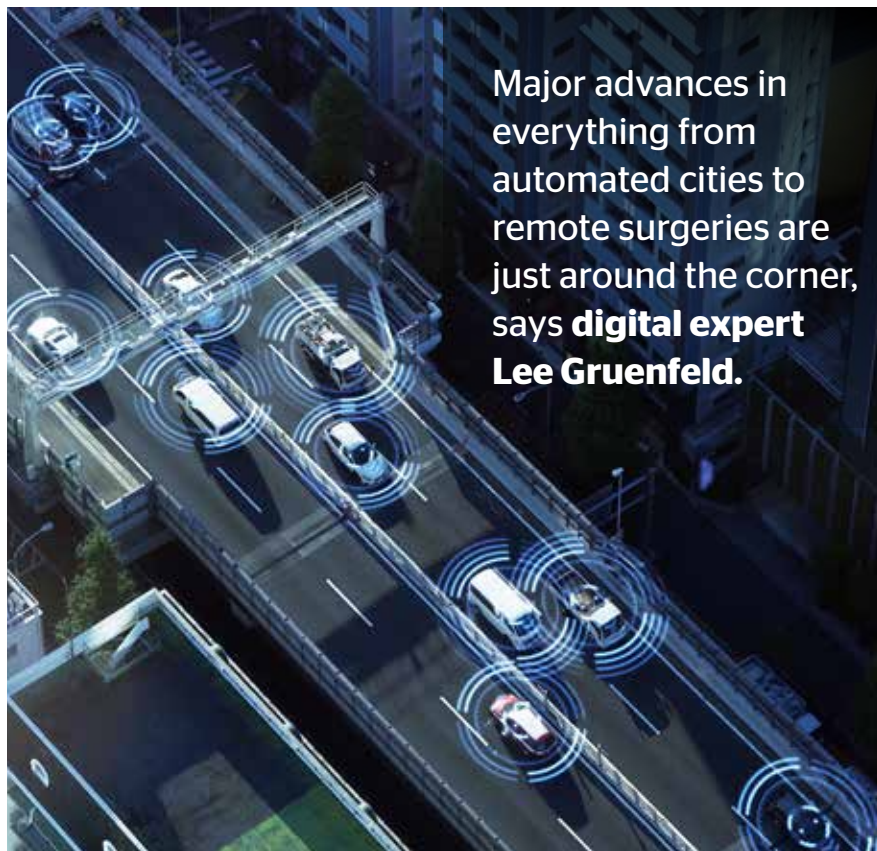
“Both the U.S. and China are trying to innovate, develop, and create the most cutting-edge technologies that both sides hope will allow their countries to gain a disproportionate share of the market,” said Timothy Heath, the senior international defense researcher for the Rand Corporation.

“The so-called ‘tech war’ is really a competition for leadership in the creation and manufacture of advanced technologies.”

China expert and author Gordon Chang told Newsmax the country that leads in technology will likely commandeer control as the world’s economic leader.

“Tech is critical,” he said. □

# 5G Revolution Means More Than Faster Phone Downloads



Major advances in everything from automated cities to remote surgeries are just around the corner, says **digital expert Lee Gruenfeld.**

**A**PPLE HAS UNLEASHED AN industry-wide tsunami of marketing to coax Americans to open their wallets and upgrade to the new 5G iPhone technology.

Super-quick connections and lightning-speed downloads at your fingertips are just waiting for you. Or so they say.

But to achieve those promised benefits at this point, you’ll need to be in one of only a handful of cities with 5G service, and you need a new phone with 5G capability — your current model can’t use it, and the new ones cost between \$1,099 and \$1,399.

What’s more, users have to be

within 1,000 feet of a 5G antenna.

5G signals have a very short range and won’t easily go through buildings, so they will require indoor towers in office buildings, shopping malls, and hotels, raising privacy concerns because it will be easier to pinpoint your exact location.

Nevertheless, 5G is more than just a gimmick to get you to buy a new phone. It will be a game-changing technology that’s poised to dramatically affect our lives, and the benefits will go way beyond being able to download a Harry Potter movie in 10 seconds flat.

5G’s capabilities will enable things we could only dream about before.

**>> Home automation:** Because 5G has almost zero connection delay, it will integrate all smart devices in the home, allowing thermostats, lights, kitchen appliances, home entertainment systems, and security cameras to instantly be operated at the push of a button.

**>> Smart cities:** 5G will allow municipalities to control traffic flow, improve personal safety by coupling police computers with residential and commercial smart cams, and make it easier to work from home.

**>> Driverless vehicles/drone deliveries:** By connecting smart cars, 5G can safely operate vehicles without drivers, linking speed and destinations. It can also program drones to pick up and deliver packages, and even return items that are not wanted.

**>> Farming:** Wireless sensors using 5G can monitor field conditions and detect when crops need watering, pesticides, or fertilizer, reports Fortune.com. They could also help with tracking livestock and guiding agricultural drones and self-driving tractors.

This could lead to improved crop yields and higher-quality produce, but fewer jobs for unskilled agricultural workers. It will take years before 5G networks are available in rural areas, however.

**>> Remote healthcare/robotic surgery:** 5G can handle sophisticated imaging equipment to test and diagnose patients from their homes and ship medicines via drones. Doctors can perform operations remotely through 5G-coordinated robotics.

**>> Precision manufacturing:** 5G will speed up this highly competitive business via smart factories that integrate automation, artificial intelligence, and platforms for troubleshooting. Its control of analytics software can crunch real-time data on every machine to control supply and demand.

**>> Military weapons:** 5G will bring new real-time accuracy to hyperson-

ic weapons, such as missiles with nuclear warheads. It will revolutionize battlefield strategies by enabling military personnel to transmit maps, photos, and instructions in real time.

**>> Power grid:** 5G's connectivity will allow energy companies to streamline and speed up operations. It will also incorporate smart meters for pinpoint readings of energy usage, for more accurate billing.

The key advantages of 5G are very high speed, very little delay in making connections and starting data flowing, the ability to handle millions of connected devices simultaneously with no loss of performance, and unprecedented reliability.

This near-zero latency is essential for applications where any delay between an instruction and implementation spells disaster.

Think of thousands of autonomous cars traveling at 65 miles per hour. Or robotic surgery, defense guidance systems, precision manufacturing, and other uses where instantaneous, continuous data is needed.

As if an unprecedented leap in speed and latency weren't enough, 5G enables more digital devices to be connected to the network than ever before.

Today's 4G networks accommodate roughly 100,000 devices per square kilometer. 5G has the ability to connect more than a million within that same area.

Similar to freeway commuter traffic, 5G eliminates data congestion by raising the digital speed limit so traffic moves faster, adding more lanes and more routes. 5G is like a multilayered data highway offering multifaceted benefits.

Faster speed and near-zero latency allows apps to be continuously streamed from the cloud, so power-greedy chips are no longer needed on the devices themselves. □