

Applied Biosystems™ QuantStudio 7 Pro Dx Real-Time PCR System Holds Up to World's Best Hackers



In a massive conference center in Las Vegas this August, 25,000 of the world's best cybersecurity professionals gathered for three days of hacking into various computers and networks. It's not the first place one would expect to see a Thermo Fisher Scientific QuantStudio product, but it was there as part of DEF CON 2022, one of the world's largest and most notable hacking conventions that brings together top cybersecurity professionals to put products to the ultimate test.

Not one of the elite computer security professionals was able to hack into the [QuantStudio 7 Pro Dx](#), the real-time PCR instrument chosen for testing. As the newest offering in the flagship QuantStudio line, this instrument supports molecular diagnostic assays with recent product upgrades, including cloud-connected smart features like hands-free functionality and voice commands.

"QuantStudio 7 Pro Dx's presence at DEF CON was a huge success," said Jay Radcliffe, director of Thermo Fisher Scientific's security testing program, who nominated the product for DEF CON. "This confirms the overwhelming confidence we already had in this product, and hopefully provides a layer of transparency to our customers."

Over the three-day conference, more than 2,500 attendees—or 10% of the conference—took part in attempting to hack the QuantStudio 7 Pro Dx. "There was a great turnout, and attendees loved the timely, real-world application of trying to hack a device that's used to test for SARS-CoV-2," Radcliffe said.

DEF CON features a specialized [Biohacking Village](#), which provides an immersive world-class medical lab for testing healthcare cybersecurity, including emerging

biotechnologies, pharmaceutical manufacturing, and protected health information. Events include Capture the Flag: a simulated hospital cyberattack, thought leader presentations, and hands-on workshops that pertain to the healthcare industry.

With the growth of telemedicine and computer automation, cyberattacks on protected patient information are a growing threat. According to a new [bipartisan bill](#) proposed in April 2022, in almost every month in 2020, more than one million people in the U.S. were affected by data breaches, and cyberattacks on healthcare facilities rose by more than half in 2020. These attacks are not only disruptive to workflows—they are disastrous to patient confidentiality.

The QuantStudio 7 Pro Dx includes smart features like remote support and hands-free functionality with the ability to perform basic operations using voice commands. Full connectivity is key to accessing the entire QuantStudio ecosystem and fully leveraging the product's benefits.

“Great cybersecurity connects the dots between our products’ advanced features and enables usage to take place safely,” said Radcliffe. “This gives our users peace of mind when it comes to their products’ cybersecurity so they can take full advantage of their cutting-edge features.”

When asked if stumping the hackers felt like winning, Radcliffe said, “we’re just trying to make the world a safer place. That’s how everybody wins.”

Learn more about the Applied Biosystems QuantStudio 7 Pro Dx Real-Time PCR System at thermofisher.com/quantstudio7prodx.