



Product Announcement Update

Contacts:

Andrew Hammond
MagiQ Technologies, Inc.
617/ 661-3338
andy@magiqtech.com

Anthony Citrano
fama PR
617/ 758-4140
anthony@famapr.com

MagiQ Technologies Announces General Availability of World's First Commercial Quantum Cryptography System

MagiQ QPN Security Gateway Offers Future-Proof, Unbreakable Encryption via Quantum Key Distribution; Effective on an Unprecedented 120km Distance

NEW YORK, NY – Nov. 3, 2003 – MagiQ Technologies, Inc., *the* quantum information processing (QIP) company, today announced the general availability of its MagiQ QPN Secure Gateway, the world's first commercially available quantum key distribution (QKD) system. Relying on the laws of physics rather than the computational difficulty of breaking keys, and easily integrated into existing digital computing infrastructures, MagiQ QPN solves key distribution problems that have been the bane of cryptographers for centuries. Incorporating real-time key generation with quantum distribution of those keys makes for the most secure cryptographic system ever. MagiQ QPN offers cost-effective protection from both internal threats, such as disgruntled employees, and external threats including corporate, government, and other sources of exposure. MagiQ QPN supports secure key exchange at distances up to 120 km, a major technical accomplishment that makes very long secure spans possible *via* cascading devices.

“After years of research and development, we are proud to have reached commercial availability for this groundbreaking product. Until today, encryption keys were vulnerable to being copied, and with quantum keys this is not possible,” said Bob Gelfond, founder and CEO of MagiQ Technologies. “No matter what advances occur in digital computing, quantum encryption can never be deciphered, read or copied. Whether it's securing government classified communications, protecting financial data or trade secrets, or locking down fiber segments of the telecommunications infrastructure, MagiQ QPN solves one of the world's toughest security problems.”

For telecommunications customers, MagiQ QPN 5505 adds layers of VPN security and classically based data encryption to MagiQ QPN's quantum key distribution. At the first layer, QPN 5505 provides an always-on, industry-standard, IPSEC site-to-site VPN, securing the existing solution and providing system redundancy. The second layer utilizes symmetric quantum keys from MagiQ QPN QKD for second pass, packet-level data encryption. MagiQ QPN 5505 combines quantum key distribution and data encryption for customers that require absolute security for their information and applications.

“Applying quantum key distribution along with classical cryptography, especially within segments of the telecommunications infrastructure, is a groundbreaking approach because its security rests on the solid foundation of quantum mechanics,” said Burt Kaliski, director and chief scientist of RSA Laboratories. “A solution such as MagiQ QPN, with the ability to detect eavesdropping with absolute certainty, can help make totally secure communication links a reality.”

The security of quantum cryptography lies in the ability to exchange the encryption key with absolute security – quantum key distribution. By encoding the encryption key photon by photon and having more than one piece of information on each photon, quantum mechanics guarantees that the act of an eavesdropper intercepting a photon, even just to observe or read, irretrievably changes that photon. Therefore, the eavesdropper can neither copy nor clone a photon nor read more than one piece of information without destroying the other piece. The use of quantum keys and truly random numbers makes data encryption absolutely secure.

“If anyone is serious about uncrackable encryption, it's the government classified customers we sell to,” said Norman Rosenthal, CTO of Tempest Systems, a federal systems integrator. “The response to the MagiQ QPN security appliance has been fantastic, and we can offer these discriminating users the absolute guarantee that any type of eavesdropping on their secure lines will be immediately detected and reported in real-time. It's the only technology we've ever seen that is 100% secure.”

QIP is the intersection of quantum physics and computer science, moving beyond classical computers and previously unsolvable problems by making use of quantum mechanical phenomena. The field is now one of the hottest areas of both computer science and physics.

MagiQ Technologies has built a portfolio of intellectual property around QIP and plans to continue bringing to market commercial implementations of field-tested

quantum information devices. For more information about MagiQ QPN, please visit www.magiqtech.com or e-mail sales@magiqtech.com.

About MagiQ Technologies, Inc.

MagiQ Technologies (www.magiqtech.com) is *the* quantum information processing (QIP) company. Through its unique blend of science, business and engineering expertise, the Company is the first to commercialize the advancements in quantum information to benefit forward-looking organizations seeking competitive advantage through technology. Founded in 1999, MagiQ is a privately-held company headquartered in New York City with research & development laboratories in Somerville, Mass.

#

MagiQ, and MagiQ QPN are trademarks of MagiQ Technologies, Inc.