

Meet the XGR Series QKD Platforms



Quantum Key Distribution designed for Academia & Research Institutes

Quantum Key Distribution (QKD)makes data safe now and in the future.

QKD addresses confidentiality when associated with symmetrical encryption, enabling unbreakable communications and future-proof data privacy. It leverages the fundamental principle of quantum physics that observation causes perturbation. This means that if your key is intercepted (by a hacker) as it is transmitted within a communication network, you are alerted to the fact. The corrupted key can then be discarded before it is used to encrypt data. At the end of the day, only valid secure keys are used, which ensures safe encryption and distribution of the data.

QKD is the only known cryptographic technique which provides proven secrecy of encryption keys, as well as long-term data confidentiality and integrity. It also:

- Secures sensitive data exchanges once and for all
- Immediately detects eavesdropping
- (Its effectiveness is not impacted by future technological advances
- \bigcirc Will form the basis of the world's future quantum internet



Become the quantum ambassador of your national quantum initiatives

The computing world stands on the threshold of something equally exciting and alarming. The age of the quantum computer is almost upon us, and it is going to radically change the way we think about big data management and security. The Quantum Revolution is predicted to have a greater impact than the internet on all aspects of modern life.

As organizations become increasingly data-rich, cybercriminals are becoming increasingly sophisticated and persistent. Our precious data resources are coming under attack. Quantum technologies are already playing a major role in how we manage and secure this data now and in the future.

The Quantum decade has started, and quantum initiatives are flourishing all over the world. The study of QKD has acquired a new sense of urgency: it is simply not possible to wait until the arrival of quantum computers to design and test suitable cryptographic methods.

Teach the next generation and gain knowledge

The XGR Series of QKD platforms was developed by ID Quantique to serve as a versatile research tool for both academic and technology evaluation labs. It allows you to start experimenting with QKD in your lab today, and to expand your quantum knowledge and skills rapidly.

The XGR Series

- Open platforms and user-friendly interface for easy evaluation and testing
- Automated and manual operations: experiment with different parameters and study various setups
- Comprehensive software suite with full real-time monitoring and management system
- Access to QKD parameters, keys and RAW keys via API
- Interface to external detectors on-demand
- Services: installation, training, product customization, support

Learn more >

Applications:

- Test 5G network security
- Run a QKD testbed
- Build a Quantum lab
- Nation-wide Quantum
 Communication Infrastructure
- Security hardening of datacenters and Security Operations Centers (SOC)





Trust our 20 years of experience

We have been helping academia and research labs to bridge the gap between research and real-world applications for 20 years. From OEM to integrated solutions, IDQ's quantum safe and quantum sensing range of products are used to solve complex scientific and industrial problems with state-of-the-art tools and instrumentation.

Our aim is to empower you to explore a host of quantum technologies and create the building blocks for a Quantum Internet, while helping you to give high visibility to your projects and to lead quantum innovation in your field.

Our latest collaborations:

- OPENQKD: the collaborative European project to install and run testbeds in several European places to test and showcase QKD systems under different use case scenarios <u>Learn more</u>
- Poznań Supercomputing and Networking Center (PSNC) and ID Quantique collaborate to provide the first QKD services on an operational network in Poland and the world's first cross border QKD connection <u>Learn more</u>
- The Brno University of Technology opens a unique laboratory of quantum security <u>Learn more</u>

Our XGR Series of QKD platforms for R&D applications is available now - it has been designed for you.

CONTACT US >

Choose what suits you best: turnkey PoC package, loan, acquisition - contact us for more information.