





PPK as a Service: Quantum-safe VPN encryption for your Al datacenter communications

About pQCee:

pQCee Pte Ltd is a quantum cybersecurity startup. We design and build post-quantum products and solutions to strengthen and protect the \$trillion digital economy against quantum attacks. Please visit www.pqcee.com or contact info@pqcee.com for more details.

About the QKDLite PPK-as-a-Service offering

Business data transmitted to AI datacenters and GPU clusters in the cloud need to be protected against data theft. Today, hackers can attack the system by eavesdropping the communication link and use a quantum computer to decrypt the information in the near future.

QKDLite is a post-quantum key management module that can enable existing IPSEC Virtual Private Networks (VPNs) with Post-quantum Preshared Keys (PPK) to create quantum-safe encrypted tunnels based on the RFC8784 standard. The QKDLite PPK-as-a-service provides:

- Seamless interface via ETSI QKD 014 API
- 2-way TLS authenticated session with post-quantum encryption
- 256-bit keys with forward secrecy via Quantum RNGs

With the QKDLite PPK-as-a-service offering on Azure, organizations only need to configure the IPSEC VPNs to point to the respective QKDLite nodes in the cloud to make AI datacenter communications quantum-safe in a matter of hours.

QKDLite PPK VPN IPSEC VPN with RFC8784 Post quantum pre-shared key (PPK) QKDLite PPK VPN QKDLite PPK VPN

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Why Microsoft Azure?

Be future-ready

Continuous innovation from Microsoft supports your development today, and your product visions for tomorrow. With 1,000+ new capabilities in the past year, you can build on the latest advancements in Al, blockchain, Kubernetes, containers, and databases to keep you ahead of the curve.

Our enterprise grade analytics solution outperforms the competition, costs less, and is fully compatible with your existing development, BI, and data-science tools

Operate hybrid seamlessly

On-premises, in the cloud, and at the edge—we'll meet you where you are. Integrate and manage your environments with tools and services designed for hybrid cloud.

Enhance security, simplify access, and set smart policies across your different environments with a single-identity platform trusted by 90% of enterprises globally.

Build on your terms

You have choices. With a commitment to open source and support for all languages and frameworks, build and deploy how you want to. Take advantage of the full-featured, integrated development environments with built-in support Visual Studio and Visual Studio Code, the most popular IDEs trusted by 15M+ developers.

We embrace open source, drive innovation through collaboration, and contribute back to the community.

Trust your cloud

Get security from the ground up, backed by a team of experts, and proactive compliance trusted by enterprises, governments, and startups.

With a \$1B+ investment in security R&D and 3,500 cybersecurity experts, security is foundational for Azure.



Microsoft Azure is an ever-expanding set of cloud computing services to help your organization meet its business challenges. With Azure, your business or organization has the freedom to build, manage, and deploy applications on a massive, global network using your preferred tools and frameworks.

Learn more at www.azure.com