Vendor profile: QNu Labs

Indian quantum cryptography pioneer, founded in 2016 at IIT Madras, has a small production hub in Bengaluru and a growing global footprint; it targets US$24M revenue by FY26

Summary

This vendor profile provides a brief introduction to QNu Labs Private Limited (also referred to as QuNu Labs).

QNu Labs, an Indian quantum technology leader headquartered in Bengaluru, specializes in quantum-secure data protection. Leveraging its hybrid approach combining Quantum Key Distribution (QKD) and Post-Quantum Cryptography (PQC), the company offers advanced security solutions for sectors such as defense, banking, telecommunications, and healthcare. Its product suite includes Tropos QRNG, a quantum random number generator; Armos QKD, a secure communication system for distances up to 150 km; Hodos PQC, a scalable cryptographic stack; and Tholos Key Vault, a data security solution. Cloud-based services such as Qosmos and Vault-as-a-Service, along with applications like QE Mail and QVPN, round out its offerings.

The company's in-house R&D and small manufacturing facility in Bengaluru underscores its commitment to the Make-in-India initiative, enabling local production of quantum-secure technologies and reducing reliance on imports. This facility produces critical components such as single photon detectors and time-to-digital converters. Partnerships with ISRO and IN-SPACe highlight its commitment to satellite-based QKD systems, paving the way for secure communication across terrestrial and satellite networks.

Key milestones for QNu include securing defense contracts, such as deploying QKD systems for the Indian Navy, and winning the iDEX Open Challenge, showcasing its role in India's defense innovation ecosystem. Its flagship QShield platform integrates NIST-compliant cryptographic algorithms, which aims to facilitate seamless adoption of quantum-safe systems.

With $6.5 million raised in 2023 and a projected revenue of INR 2,000 million ($24 million) by FY2026, QNu Labs is expanding globally, targeting markets in the US, Europe, and West Asia. Through its quantum technologies and collaborations, QNu Labs is positioning itself as a global leader, ensuring robust security in a rapidly evolving digital landscape.

Company Fact Finder

The table below provides a snapshot view of QNu Labs and its operations.

Table 1: Vendor Snapshot - QNu Labs

Metric	Details
Founding story	QNu Labs was founded in 2016 by Sunil Gupta, Srinivasa Rao Aluri, Mark Mathias, and Dr. Anil Prabhakar. The company was incubated at the Indian Institute of Technology-Madras (IIT-M) Research Park, and is headquartered in Bengaluru, Karnataka (India).