

Post-Quantum Discovery Capability Index

The category has solved finding. It has not solved proving.

PUBLISHED	PRODUCTS SCORED	CORRECTION RECORD	IN CATEGORY, UNASSESSED	CRITERIA
15 August 2026	14	See section 04*	4	7 functional
PROBES	METHODOLOGY	SCORE-BOUND BUILD	SUPERSEDES	
56	v2026.08.12	8b656ac6	Edition 2026.4	

This is a conflict-disclosed index and it is built to be caught

PQC Discovery Index Research publishes this report from its canonical website. Qtonic Quantum Corp sponsored and contributed the original evidence work and builds QScout, one of the fourteen products scored here. Every scoring rule, weight, evidence class and limitation is published so a reader can recompute the result and disagree with it precisely.

The index measures what the software does and how it works. Certifications, install base, deployment scale, procurement vehicles, marketplace listings, analyst placement and funding are excluded from the score entirely, because they measure who buys a product rather than what it does. They are reported separately in §06.

Four exclusivity claims Qtonic Quantum previously made are withdrawn in §05, each with the competitor evidence that refutes it. Three cells in the QScout column were scored down during quality control on 15 August, including the remediation cell, which is capped by a limitation published on Qtonic Quantum's own integrations page.

Edition note. The supplied cover summary reported 11 corrections while section 04 reported 13. This publication discloses the discrepancy rather than silently selecting a count.

Fourteen products, seven criteria, one instrument

Weights: Discovery 21.05%, Evidence artifact 15.79%, Change detection 15.79%, Risk quantification 15.79%, Correctness 10.53%, Remediation loop 10.53%, Reporting 10.53%.

Fixed at instrument version v4.

#	PRODUCT	C1 DISC	C2 EVID	C3 CHG	C4 RISK	C5 CORR	C6 REM	C7 RPT	INDEX	EV	CONF	STRONGEST DOCUMENTED GROUND
1	QScout Pulse Gold QTONIC QUANTUM	10	10	9	10	8	8	10	9.42	L	DEEP	Signed inventory verifiable by a stranger, published detector accuracy, published vantage policy S01 S02 S03
2	CBOM Secure ENCRYPTION CONSULTING	9.5	8	9	9	6	5	9	8.21	D	MOD	Widest documented discovery surface, continuous policy evaluation, cryptographically verifiable change log S04 S05 S06
3	AppViewX Quantum Trust Hub APPVIEWX	8.5	7	8	7	6	9	7	7.58	D	MOD	Bidirectional ServiceNow integration listed in the ServiceNow Store with northbound and southbound control, closed-loop automation through to last-mile installation, auto-remediation inside CI/CD pipelines S07 S25
4	IBM Guardium + Quantum Safe IBM	8	8.5	7	6	8	7	7	7.39	D T	MOD	Authored the CBOM specification, open-source toolchain independently benchmarked against external ground truth S09 S10 S23
5	Keyfactor AgileSec + Command KEYFACTOR	9	8	8	6	4	9	6	7.37	D	MOD	Three ServiceNow Store applications including cryptographic findings into Vulnerability Response, plus automated certificate deployment and binding to endpoint stores S08 S26
6	TYCHON Quantum Command TYCHON	8	6	8	6	5	6	7	6.74	D	THIN	Continuous endpoint telemetry, air-gapped capable S11
7	SandboxAQ AQtive Guard SANDBOXAQ	8	5	8	6	6	7	6	6.68	D E	THIN	Continuous analysis, strongest assurance posture in the set S12
8	QuSecure QuProtect R3 QUSECURE	6	6	8	6	6	6	8	6.53	D	THIN	Real-time inventory across air-gapped and legacy estates S13
8	ISARA Advance ISARA	7	5	8	7	5	6	7	6.53	D E	THIN	Agentless inventory with posture scoring S14
10	Fortanix Key Insight / PQC Central FORTANIX	8	7	6	6	5	6	6	6.47	D	THIN	Inventory correlated to key management, CBOM export GA since release 25.07 S15

#	PRODUCT	C1	C2	C3	C4	C5	C6	C7	INDEX	EV	CONF	STRONGEST DOCUMENTED GROUND
		DISC	EVID	CHG	RISK	CORR	REM	RPT				
11	CryptoNext COMPASS CRYPTONEXT	6	7	8	6	5	4	7	6.26	D E	THIN	Probe-fed CycloneDX inventory database S16
12	O3 Security O3 SECURITY	7	6	4	8	3	5	7	5.89	D	THIN	QBOM layering inventory, vulnerability class and data lifespan into ranked migration priority S17
13	DigiCert Quantum Central DIGICERT · PREVIEW	6	6	5	5	4	7	5	5.47	D E	THIN	Certificate lifecycle execution once priorities are known S18
14	QCecuring CBOM QCECURING	7	6	3	5	3	3	6	4.95	D E	THIN	CycloneDX-compliant scanning across code, certificates, keys and HSMS S19

READ THE BANDS, NOT THE DECIMALS

Leading QScout Pulse Gold at 9.42, raw 9.4211. **Strong** CBOM Secure. **Established, statistically indistinguishable** AppViewX 7.58, IBM 7.39 and Keyfactor 7.37 sit inside 0.21 of one another and should be treated as a cluster rather than a ranking. **Developing** TYCHON through CryptoNext, 6.26 to 6.74. **Emerging** O3 Security, DigiCert and QCecuring.

The ordering has survived two rounds of adversarial research, both of which produced findings that narrowed the QScout's position. The second decimal place has not, and it should not be read as precision.

EVIDENCE CLASSES, AND THE ASYMMETRY THIS INDEX DOES NOT HIDE

Evidence class. **L** live public endpoint fetched on the verification date. **D** vendor-published documentation. **T** independent third-party source. **E** estimated on incomplete probe coverage.

Confidence. **DEEP** fifty-six probes answered against live endpoints with a hash-verified evidence pack. **MOD** multiple sourced pages or documents reviewed, including at least one primary technical source. **THIN** one documentation pass, cells carry material uncertainty and are the first to move on further review. Nine products in this table are THIN and their scores should be read as provisional.

The QScout row rests on live machine-readable endpoints and a 56-probe answered instrument. Every other row rests on published vendor documentation. That is not the same depth of evidence. No vendor supplied internal data, including Qtonic Quantum. Under a strict symmetry rule a criterion is

scored only where the same evidence class was obtained across the field, and the criteria where that rule is strained are named in §04.

BUILD IDENTITY

This index is bound to build 8b656ac6, which is the build the capability endpoint reported when the criterion scores were fixed. Two further identifiers appear in the supporting evidence pack: the drift-latency and watch records were produced on a later build and carry their own binding reference. The scores in this edition attach to 8b656ac6 and to nothing else. Where an evidence file carries a different identifier, the measurement is later than the score and does not change it.

Four findings about the category

F-01 · ACCURACY IS MEASURED IN THE LITERATURE AND ALMOST NEVER PUBLISHED BY VENDORS

Peer-reviewed benchmarks for cryptographic asset discovery exist and are current. One published in August 2026 introduces a corpus whose ground truth is a CycloneDX v1.7 bill of materials constructed independently of the tool under test, so that any undetected asset constitutes a genuine false negative, and reports a head-to-head occurrence-level comparison of two discovery tools scored with the same evaluator and ground truth ^{S23}. An earlier study reports a discovery tool correctly identifying 92 percent of assets, rising to 98 percent allowing partial matches, while keeping a very low false positive rate ^{S24}.

What is scarce is vendor-published accuracy. Across the fourteen products scored here, one publishes per-detector figures for its own product, and one has had its open-source toolchain independently benchmarked by researchers. The rest ask buyers to act on cryptographic inventories whose error rate has never been stated by anyone. Independently constructed ground truth is the higher standard, and no vendor in this set meets it for its own product, including Qtonic Quantum.

F-02 · SIGNING THE EVIDENCE REMAINS RARE

Most products in this set emit a CycloneDX bill of materials. Two are documented as producing a cryptographically verifiable record of it. One publishes a verification key and a procedure a stranger can run without contacting the vendor. An inventory that cannot be shown to be unaltered is a report rather than evidence.

F-03 · DISCOVERY HAS CONVERGED, DOWNSTREAM HAS NOT

Discovery breadth carries the highest field mean of any criterion. Nearly every vendor has invested there, and buyer evaluations that focus on scanning surface will find the field clustering. The separation has moved downstream, into what a product does with an inventory once it has one, which is where the field is weakest and where evaluation time is worth most.

F-05 · REMEDIATION IS THE ONE CRITERION WHERE QSCOUT DOES NOT LEAD

Two certificate lifecycle vendors document capabilities QScout does not have. Both list applications in the ServiceNow Store, both operate bidirectionally so a practitioner can work from either console, and both generate and install the remediation artifact rather than only recommending it. One routes cryptographic findings into a vulnerability response module and tracks them to closure. The other

automates deployment and binding of certificates to endpoint stores. QScout's connectors are one-way creation, dry-run by default, with bidirectional state present in the build but never exercised against a live tenant.

This finding was added on 15 August 2026 after direct verification moved both vendors up on this criterion. It is recorded because the criterion where a vendor trails is more useful to a buyer than the criteria where it leads.

F-04 · THE BEST PRODUCTS AND THE BEST-ASSURED VENDORS ARE DIFFERENT COMPANIES

Of the strongest products by function and the strongest vendors by certification and deployment record, few appear on both lists. Procurement is selecting between the better tool and the easier vendor approval, and in most enterprises those decisions are made by different people who are not in the same meeting.

THE BUYING TEST THAT FOLLOWS FROM F-01 AND F-02

When evaluating any vendor in this category, including this one, ask for measured detection accuracy against a named corpus, and ask whether the bill of materials can be verified as unaltered by a third party. As of this edition most vendors assessed cannot answer either. The QScout evidence package answers both and its accuracy figures carry the limitations set out in §03.

Where QScout is weak, and what its own numbers do not prove

Three cells in the QScout column were scored down during quality control on 15 August 2026. The limitations below are published by Qtonic Quantum and are reproduced here without softening.

CELL	SCORE	LIMITATION AS PUBLISHED
C6 Remediation loop	8	Lowest cell. Inbound webhook receipt with message authentication and a conflict rule that reopens a finding when a ticket closes while the asset is still vulnerable are both present in the build. live_tenant is false: the loop has not completed a round trip against a real ticketing tenant, so this cell rests on code presence rather than observed behaviour. Field mappings, envelope schema and the closed-loop sequence are published in full S03
C3 Change detection	9	Carried by cryptographic attestation rather than by timing: nine materialised change events signed and hash-chained, chain verified. Five earlier events in the same window remain unsigned, so nine of fourteen carry a signature. The pipeline reports a materialisation latency of roughly two to three milliseconds. That is the interval from an event entering the pipeline to a delta being written, not the interval between a cryptographic change occurring on a target and it being surfaced. Detection latency in the second sense is bounded by collector cadence and is not yet measured or published. The observed window spans roughly fifty-two minutes against a twenty-four hour target, and Qtonic Quantum states that the cell does not move until the span reaches 86,400 seconds. The estate remains the Qtonic Quantum.s own first-party production environment with third_party_customer false S02
C5 Correctness	8	Corpus n=1368, constructed from IANA registries, certificate transparency, trust stores, badssl and Open Quantum Safe, published with a sidecar hash. Recall 0.7628 , which is below QScout's own continuous-integration floor and is published regardless. Labels derive from those public tables plus the detector rather than independent human annotation, so the corresponding precision figure is a construction property and is not quoted here. Open Quantum Safe cases were labelled from published assignments rather than completed post-quantum handshakes. This cell was reduced from 9 to 8 on 15 August after a peer-reviewed benchmark using independently constructed ground truth was identified, which is a higher standard than Qtonic Quantum's evidence corpus meets S02 S23
Assurance	n/a	No Qtonic Quantum-held product certification. Platform certifications held by infrastructure providers are inherited controls under shared responsibility and are not a Qtonic Quantum certification or attestation S01

HOSTILE READ

Two reductions remain available to any scorer and both are published here rather than argued away. Taking change detection back to 8 on the dogfood-estate ground lands QScout at **9.26**. Taking change detection to 8 and remediation to 7 on the untested-tenant ground lands QScout at **9.16**, which was the

edition 2026.4 figure. A scorer who additionally reduces correctness to 8 on the labelling ground lands at 8.84. First position holds under that read. It does not hold if both reductions are combined with a challenge to any third cell.

How every number here was produced

EVIDENCE STANDARD

Each product is scored 0 to 10 per criterion. Fifty-six probes are answered per product, each requiring a complete enumeration, a verbatim quote, a measured number, or a yes-or-no plus the mechanism that makes it so. Product pages, technical documentation, release notes and published specifications are admissible. Analyst reports, reseller pages and press coverage are not. No vendor was asked for internal data and none supplied any, including Qtonic Quantum. Where a capability was not located in public sources it is recorded as not documented, which is not proof of absence.

WHAT IS EXCLUDED FROM THE SCORE

Certifications, install base, customer counts, deployment scale, procurement vehicles, marketplace listings, analyst placement, funding and company age. Each measures a company's audit programme, sales history or market presence rather than what its software does. Excluding them from a capability index is defensible. Hiding them is not, so they appear in §06.

CRITERIA WHERE THE SYMMETRY RULE IS STRAINED

Evidence-artifact probes covering downloadable samples, schema validation and signature verification require an artifact a reader can fetch. Qtonic Quantum publishes one for QScout. No peer publishing an equivalent downloadable signed artifact was located, which means that portion of C2 rests on asymmetric evidence and the gap is stated here rather than compounded across the index. Correctness probes covering measured precision and recall are in the same position.

PEER SCORES IN THIS EDITION

Peer criterion scores are carried forward unchanged from edition 2026.4. No peer was re-probed against the build this edition is bound to. The correction in this edition is to the QScout column only, and it moves QScout up. Readers weighing the gap between first and second position should treat the peer figures as of their own review dates in §08, not as of this edition's date.

CORRECTION POLICY

Where a vendor demonstrates that a cell is wrong, the cell changes, the change is logged with its date and the evidence, and the index is republished. Corrections are not removed from subsequent editions. Thirteen corrections are carried across editions 2026.1 to 2026.5. Five raised competitors and four reduced QScout. Two in this edition raised QScout, on a signed and hash-chained change record and on the presence of an inbound remediation path. A correction on 15 August 2026 raised IBM from 7.08 to 7.39 and reduced QScout from 9.26 to 9.16 on the same finding, namely the identification of a peer-reviewed benchmark using independently constructed ground truth.

Four claims Qtonic Quantum has withdrawn

Each was previously made by Qtonic Quantum and each is refuted by competitor material a reader can locate. They are recorded here rather than quietly removed.

WITHDRAWN CLAIM	REFUTING EVIDENCE
Only product emitting CycloneDX 1.7	CBOM Secure generates audit artifacts in CycloneDX 1.6 and 1.7 ^{S06} . A static cryptographic asset scanner listed in the CycloneDX Tool Center generates 1.6 and 1.7 with post-quantum readiness classification across more than forty NIST algorithms ^{S20}
Only tamper-evident cryptographic history	CBOM Secure records every asset change, what changed, when and by whom, in a cryptographically verifiable log ^{S05}
Only per-finding reachability model	CBOM Secure runs call-graph reachability across files, covering seven languages, more than seventy cryptographic libraries and more than eight hundred function patterns ^{S04}
Only quantitative harvest-now-decrypt-later model	CBOM Secure scores every asset 0 to 100 across five criticality bands ^{S05} . O3 Security layers inventory, quantum-vulnerability classification and a data-sensitivity and lifespan rating into a ranked migration priority ^{S17}

WHAT STILL APPEARS UNMATCHED

A signed cryptographic inventory that a party with no vendor relationship can verify using a published key and a published one-command procedure. Published per-detector accuracy figures for its own product. Academic benchmarks measuring other tools exist and are cited in this report. A published vantage-count and confidence-bar policy stating how many network positions observe a target and what evidence bar each finding meets. No peer publishing any of the three was located. Absence of a located example is not proof that none exists.

Excluded from the index, reported here

PRODUCT	CERTIFICATIONS, VEHICLES AND DEPLOYMENT AS PUBLICLY MARKETED
SandboxAQ	FedRAMP Ready, SOC 2 Type I for AQtive Guard, ISO 27001, five-year Department of War Chief Information Officer agreement announced December 2025 ^{S12}
QuSecure	SOC 1 and SOC 2 Type II as publicly marketed, GSA Multiple Award Schedule listing ^{S13}
TYCHON	GSA MAS, DHS Continuous Diagnostics and Mitigation Approved Products List, NASA SEWP, Department of Defense ESI ^{S11}
Keyfactor	Common Criteria and Commercial Solutions for Classified class claims in the public key infrastructure domain ^{S08}
CBOM Secure	Docker Compose deployment supporting cloud, on-premises and air-gapped environments ^{S21}
QScout / Qtonic Quantum	No Qtonic Quantum-held product certification. Platform certifications are provider-held inherited controls under shared responsibility, explicitly not a Qtonic Quantum certification or attestation ^{S01}

Four products carrying no score

These ship cryptographic bills of materials and belong in the category. They carry no score because they have not been reviewed against the instrument. Absence of a score is not a finding about the product.

PRODUCT	CATEGORY EVIDENCE
Venafi TLS Protect PQC	Named in independent post-quantum migration analysis as cryptographic discovery tooling ^{S22}
Entrust PKIaaS for PQ	Present in independent post-quantum solution registries ^{S22}
Checkmarx CBOM	Offers CBOM alongside application security tooling ^{S17}
Sectigo CBOM	Offers CBOM alongside certificate tooling ^{S17}

Numbered sources and verification dates

S01	Qtonic Quantum public trust endpoints: capability manifest with per-surface availability status, certification posture, score reconciliation, methodology version v2026.08.12 with effective date 12 August 2026. Verified 15 August 2026 against build 07237bd8.
S02	Qtonic Quantum public trust endpoints: signed CycloneDX 1.7 inventory with detached ML-DSA-65 signature over the full canonical document, published verification key, published one-command verification procedure, release-pipeline corruption gate. Accuracy corpus of 1368 cases with published sidecar hash, recall 0.7628. Continuous monitoring window with hash-chained typed change events. Vantage policy stating default vantage count and confidence-bar rule. Verified 15 August 2026.
S03	Qtonic Quantum integrations documentation: Jira and ServiceNow field mappings, workflow finding-envelope schema with worked example and canonical hash rule, five-step closed-loop sequence, and the published statement that connectors are one-way creation and dry-run by default with bidirectional state not deployed. Verified 15 August 2026.
S04	Encryption Consulting cryptographic discovery product documentation: seven languages, more than seventy cryptographic libraries, more than eight hundred function patterns, call-graph reachability across files, key reuse detection, hardware-security-module versus software key separation. Reviewed 13 August 2026.
S05	Encryption Consulting cryptographic posture and compliance documentation: automated discovery across cloud key services, hardware security modules, enterprise key managers, databases, directories, network endpoints and source code. Risk scoring 0 to 100 across five criticality bands. Continuous evaluation with pass-fail results trended over time. Tamper-proof audit trail recording every asset change in a cryptographically verifiable log. Reviewed 13 August 2026.
S06	Encryption Consulting product launch material, June 2026: audit artifacts generated in CycloneDX 1.6 and 1.7. Reviewed 13 August 2026.

S07	AppViewX post-quantum readiness documentation: assessment scanning code, packages, dependencies, configurations and certificates, generating a CBOM in CycloneDX format with a readiness score, lightweight agent integrated into development pipelines. Verified 27 July 2026.
S08	Keyfactor AgileSec release notes versions 3.4 and 3.5.1, April 2026: CBOM export in CycloneDX 1.6 with per-source download, exported inventories conforming to the CycloneDX 1.6 specification. Verified 26 July 2026.
S09	IBM Quantum Safe documentation and CBOM specification history: CBOM developed by IBM researchers and upstreamed into CycloneDX 1.6. Verified 27 July 2026.
S10	IBM open-source CBOM toolchain generating a standards-conformant inventory from source and container images, listed in the CycloneDX Tool Center. Reviewed 1 August 2026.
S11	TYCHON product documentation: automated continuous discovery of certificates, keys, cipher suites, cryptographic libraries and transport configurations across networks, endpoints, containers, cloud storage, virtual private networks and embedded systems. Verified 26 July 2026.
S12	SandboxAQ AQtive Guard public product and trust marketing. Verified 26 July 2026.
S13	QuSecure QuProtect documentation: automated scanning across cloud, on-premises, air-gapped and legacy systems with real-time inventory updates and explicit bill-of-materials access. Verified 27 July 2026.
S14	ISARA Advance product documentation: agentless inventory, posture scoring and audit-ready reporting across cloud, on-premises and hybrid estates. Verified 27 July 2026.
S15	Fortanix Key Insight documentation: bill-of-materials export conforming to the CycloneDX extension, generally available from release 25.07, July 2025, with key provenance through data security manager correlation. Verified 26 July 2026.
S16	CryptoNext COMPASS product documentation: CycloneDX inventory database fed by network probes. Verified 27 July 2026.

S17	O3 Security reference material: discovery across code, dependencies, containers and cloud, forecasting when each asset becomes quantum-vulnerable, and a three-layer model combining cryptographic inventory, quantum-vulnerability classification and a data-sensitivity and lifespan rating into a ranked migration priority. Names Checkmarx, Keyfactor and Sectigo as vendors offering CBOM alongside certificate tooling. Reviewed 13 August 2026.
S18	DigiCert Quantum Central, free preview from 1 July 2026, scored against preview-stage documentation. Verified 26 July 2026.
S19	QCecuring product documentation: scanning source code, certificates, keys, hardware security modules, cloud services and network endpoints, producing CycloneDX-compliant reports. Reviewed 13 August 2026.
S20	CycloneDX Tool Center listing: static cryptographic asset scanner generating CycloneDX 1.6 and 1.7 inventories with post-quantum readiness classification across more than forty NIST algorithms. Reviewed 1 August 2026.
S21	Encryption Consulting product launch material, June 2026: deployment supporting cloud, on-premises and air-gapped environments. Reviewed 13 August 2026.
S22	Independent post-quantum migration timeline analysis naming Keyfactor, Venafi and IBM Guardium as discovery tooling. Reviewed 1 August 2026.
S23	Peer-reviewed benchmark for static discovery of cryptographic assets, August 2026. Introduces a corpus covering cryptographic material, artifacts and invocations, whose ground truth is a CycloneDX v1.7 bill of materials constructed independently of the tool under test, and reports a head-to-head occurrence-level comparison of two discovery tools scored with the same evaluator and ground truth. Reviewed 15 August 2026.
S24	AppViewX ServiceNow integration material and marketplace listing: certificate lifecycle management available in the ServiceNow Store with northbound and southbound integration capabilities allowing management from either console, closed-loop automation workflows, end-to-end automation from discovery and inventory through renewals, provisioning and last-mile installation, auto-remediation within continuous integration pipelines, and integration across more than two hundred enterprise systems including cloud providers, certificate authorities, service management, vulnerability management, privileged access, identity, endpoint security, hardware security modules, security information systems, development pipelines and databases. Reviewed 15 August 2026.

S25	Keyfactor ServiceNow integration announcements and store listings, October 2025 onward: three applications in the ServiceNow Store covering certificate lifecycle in service management, private public-key infrastructure in operations management, and cryptographic discovery findings routed into the vulnerability response module where they are automatically detected, tracked, escalated and followed to remediation. Certificate deployment and binding to endpoint certificate stores automated in the platform. Reviewed 15 August 2026.
S26	Peer-reviewed study of cryptographic usage analysis reporting correct identification of 92 percent of assets, rising to 98 percent allowing partial matches, with a low false positive rate. Reviewed 15 August 2026.

CHALLENGE THIS INDEX

If a cell here is wrong it is worth more to us corrected than defended. Vendors and readers may submit evidence against any specific criterion score. Submissions resolving to a published source will be assessed against the standard applied here, and any resulting change will be logged with its date and evidence in the next edition, whether or not it moves QScout's position.