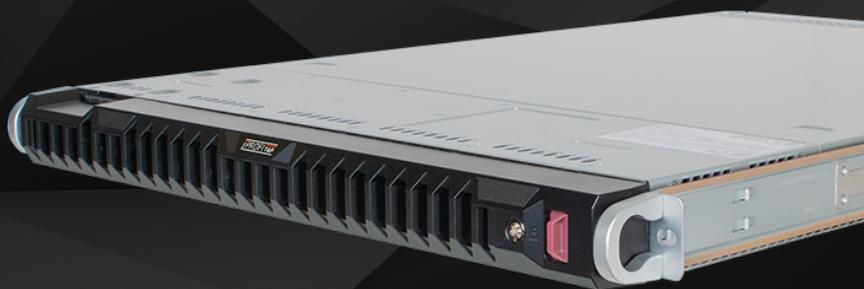


# IOTA 100 CORE

PROBE • CAPTURE • ANALYZE



IOTA 100 CORE is a high-speed packet capture and analysis solution for core networks, large branches, and data centers. It empowers network engineers to rapidly identify, analyze, and resolve performance issues, application bottlenecks, and security risks.

With IOTA 100 CORE, you can continuously capture network traffic and extract detailed real-time and historical insights into critical applications and data flows. By combining full packet capture with advanced metadata extraction, IOTA helps you:

- **Baseline network behavior:** Spot anomalies faster by measuring standard performance metrics during typical operation conditions to establish a reference point.
- **Spot performance issues:** Diagnose latency, throughput, packet loss, and retransmissions at a glance.
- **Analyze application behavior:** Track over 3,000 applications and protocols.
- **Maintain network integrity:** Quickly pinpoint security flaws and irregular protocol usage.

IOTA 100 CORE supports two 40/100G capture ports and can be deployed alone or with TAPs and Network Packet Brokers for maximum flexibility. Internally, a robust high-durability RAID 5 solid-state storage architecture ensures seamless packet capture and network activity storage, enabling real-time and long-term forensic analysis on high-speed networks.

- **Ring buffer:** Avoid data loss by continuously recording traffic in a loop.
- **Capture efficiency:** Apply filters to reduce the amount of data captured and choose to capture metadata only. This can reduce data volume by up to 90% compared to raw PCAP files while retaining critical packet-level details.
- **Scalable storage:** Choose the SSD capacity that matches your retention and analysis needs.

## Features

- 2 x 40/100G out-of-band capture inputs (8 x 10G or 4 x 25G via breakout cables)
- Dedicated probe and analysis capabilities
- Real-time statistics
- Ring buffer
- PTPv2 (IEEE 1588) nanosecond precision timestamps
- Remote access and management
- Supports TACACS+/RADIUS/LDAP authentication
- 32, 64, 128, or 307 TB high-endurance solid-state storage in RAID 5 configuration



## Technical specifications

| CONNECTORS  | LEDS & BUTTONS   |
|---|--|
| 2 x 40/100G QSFP28 capture<br>2 x SFP+ 1/10G management<br>2 x RJ45 1/10G management<br>1 x RJ45 1G BMC IPMI<br>1 x RJ45 1G PTPv2<br>2 x USB 3.0, 2 x USB 2.0<br>1 x VGA, 1 x COM | Information LED<br>NIC1/NIC2 LEDs<br>HDD LED<br>Power LED<br>UID LED<br>Power button<br>UID Button / BMC Reset |
| DIMENSIONS (WxDxH)  | WEIGHT   |
| 440 x 620 x 44 mm<br>17.3 x 24.4 x 1.7 in   | 11.3 kg<br>25 lb   |
| STORAGE   | POWER  |
| 32, 64, 128, or 307 TB high-endurance solid-state storage   | 800W: 100–127 VAC, 9–7.5 A, 50–60Hz<br>860W: 200–240 VAC, 6–4.5 A, 50–60Hz                                     |
| COMPLIANCE  | ACCESSORIES  |
| RoHS, CE, FCC, UKCA, TA   | Rackmount kit<br>2 x 860W Platinum redundant PSUs  |

## Data retention at full line rate

| DEVICE       | CAPTURE BALANCE 0-100% |                | 40 GBPS     | 100 GBPS    |
|--------------|------------------------|----------------|-------------|-------------|
| CBC-100-32T  | 50/50                  | Packet Capture | 0d 0h 46m   | 0d 0h 18m   |
|              |                        | Metadata       | 3d 5h 46m   | 1d 7h 6m    |
|              | 100                    | Packet Capture | 0d 1h 33m   | 0d 0h 37m   |
|              |                        | Metadata       | 6d 11h 33m  | 2d 14h 13m  |
| CBC-100-64T  | 50/50                  | Packet Capture | 0d 1h 31m   | 0d 0h 36m   |
|              |                        | Metadata       | 6d 8h 46m   | 2d 13h 6m   |
|              | 100                    | Packet Capture | 0d 3h 3m    | 0d 1h 13m   |
|              |                        | Metadata       | 12d 17h 33m | 5d 2h 13m   |
| CBC-100-128T | 50/50                  | Packet Capture | 0d 3h 1m    | 0d 1h 12m   |
|              |                        | Metadata       | 12d 14h 46m | 5d 1h 6m    |
|              | 100                    | Packet Capture | 0d 6h 3m    | 0d 2h 25m   |
|              |                        | Metadata       | 25d 5h 33m  | 10d 2h 13m  |
| CBC-100-307T | 50/50                  | Packet Capture | 0d 6h 13m   | 0d 2h 29m   |
|              |                        | Metadata       | 25d 22h 13m | 10d 8h 53m  |
|              | 100                    | Packet Capture | 0d 12h 26m  | 0d 4h 58m   |
|              |                        | Metadata       | 51d 20h 26m | 20d 17h 46m |

Tests based on average data center traffic

## Advanced protocol decoding and analysis

The advanced protocol decoding and analysis license enables additional capabilities for in-depth analysis using detailed functionality and performance metrics for TCP, DNS, HTTP, RTP, and TLS.

### TCP:

TCP latency, retransmissions, iRTT, out-of-order packets over time.

### DNS:

Client information, DNS server details, queries, performance metrics, error reporting.

### HTTP:

Error codes and response times for HTTP servers and individual endpoints, user agent monitoring.

## RAID 5

All storage options are configured in RAID 5, which provides a strong balance of redundancy, capacity efficiency, and read/write performance. The single-parity protection safeguards captured data from a single disk failure while maximizing usable storage space.

## Performance

Sustained write to disk: 100 Gbps

Average throughput (analysis): 100 Gbps

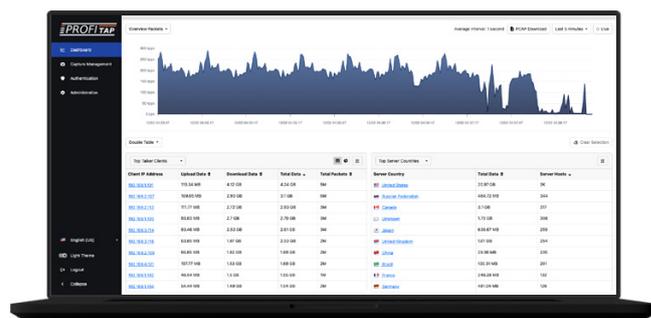
Number of flows: 9 M flows per second

Number of packets: 16 M packets per second

## License comparison

| CAPABILITY                  | BASE IOTA | APDA LICENSE * |
|-----------------------------|-----------|----------------|
| Network baseline monitoring | ✓         | ✓              |
| Top applications visibility | ✓         | ✓              |
| Bandwidth monitoring        | ✓         | ✓              |
| Top clients / servers       | ✓         | ✓              |
| TCP performance analysis    | —         | ✓              |
| DNS traffic analysis        | —         | ✓              |
| HTTP endpoint performance   | —         | ✓              |
| RTP troubleshooting         | —         | ✓              |
| TLS connection analysis     | —         | ✓              |

\* Advanced protocol decoding and analysis



## Order references

|                     |  |
|---------------------|--|
| <b>CBC-100-32T</b>  | IOTA 100 CORE incl. capture to disk function with L2-L7 statistics<br>32 TB internal storage (10 x 3.2 TB)<br>1 year warranty and maintenance (professional support, software updates, ZeroTier services)    |
| <b>CBC-100-64T</b>  | IOTA 100 CORE incl. capture to disk function with L2-L7 statistics<br>64 TB internal storage (10 x 6.4 TB)<br>1 year warranty and maintenance (professional support, software updates, ZeroTier services)    |
| <b>CBC-100-128T</b> | IOTA 100 CORE incl. capture to disk function with L2-L7 statistics<br>128 TB internal storage (10 x 12.8 TB)<br>1 year warranty and maintenance (professional support, software updates, ZeroTier services)  |
| <b>CBC-100-307T</b> | IOTA 100 CORE incl. capture to disk function with L2-L7 statistics<br>307 TB internal storage (10 x 30.72 TB)<br>1 year warranty and maintenance (professional support, software updates, ZeroTier services) |
| <b>CBC-100-APDA</b> | IOTA 100 CORE advanced protocol decoding and analysis license (TCP, DNS, HTTP, RTP, TLS)   |
| <b>CBC-100-MAIN</b> | IOTA 100 CORE 1 year of extended maintenance (professional support, software updates, and ZeroTier services)   |
| <b>CBC-100-WAR</b>  | IOTA 100 CORE 1 year of extended hardware warranty (does not cover SSD)  |