TERRAFLOW

TerraFlow Intelligence Guard

Threat-Intelligence-Driven Perimeter Defense in the Age of Encryption

Enterprise security relies on a defense-in-depth model, utilizing firewalls, IPS, and next-generation firewall (NGFW) systems to inspect traffic for malicious content. However, today, most Internet traffic is encrypted. While HTTPS and HTTP/3 (over QUIC) protect data privacy, they significantly weaken content-based perimeter detection. When malware delivery and Command and Control (C2) communications hide within encrypted tunnels, traditional file-hash matching and payload-based signatures are severely limited.

This creates an overwhelming burden on downstream controls like NDR, EDR, and SIEM—often alerting security teams only after malicious activity has already escalated inside the network

TerraFlow Intelligence Guard solves this by restoring your perimeter defense without the performance overhead, certificate-management complexity, or privacy concerns of universal TLS decryption. By automatically applying an always-on threat intelligence feed to your network, TerraFlow operationalizes millions of Indicators of Compromise (IoCs) in real-time. This stops inbound attacks and outbound Botnet/C2 communications using known-bad IPs and domains, containing attacks before damage escalates and giving your SecOps team a critical early intervention point.

Highlights

- Block Known Threats at Scale: Detect and block threats in real time by leveraging extensive IP and domain-based Indicators of Compromise (IoC) datasets.
- Geo-IP Policy Enforcement: Limit exposure to high-risk regions and reduce unnecessary traffic to untrusted countries.
- DNS-to-Connection Correlation: Identify and expose concealed outbound connections that bypass enterprise DNS visibility (e.g., Fast Flux, DoH, Dead Drop Resolvers)
- Always-On Intelligence: Continuously updated threat feeds powered by the TerraFlow AI Defense Center.
- Flexible Deployment Options: Choose between purpose-built 19-inch, 1U hardware appliances (Terra 1G and Terra 10G) and software editions with licensed throughput options of 1, 4, 6, and 10 Gbps.



Hardware Appliances and Software Editions

Threat actors continuously optimize their infrastructure to maximize operational efficiency. While file hashes can be changed through minor malware modifications, replacing IP addresses and domains requires additional resources, DNS reconfiguration, and operational effort. This creates a degree of persistence in malicious infrastructure that defenders can exploit. By leveraging observable network indicators, TerraFlow Intelligence Guard helps organizations identify and block known threats, even when traffic is encrypted.

Powered by a high-performance traffic-processing engine, TerraFlow Intelligence Guard transforms millions of IP and domain-based Indicators of Compromise (IoCs) into actionable, real-time network defenses. The platform continuously receives threat intelligence updates from the TerraFlow AI Defense Center, enabling organizations to detect, alert on, and block malicious connections at scale without requiring comprehensive TLS decryption.

Flexible Deployment: Hardware Appliances and Software Editions

TerraFlow Intelligence Guard is available as purpose-built hardware appliances and throughput-licensed software editions, allowing organizations to select the deployment model that best fits their network infrastructure and performance requirements.

Hardware Appliances — Terra 1G and Terra 10G

The Terra 1G and Terra 10G are enterprise-grade, 19-inch, 1U rack-mountable security appliances designed for high-performance inline network protection.

Both models feature integrated hardware bypass (fail-to-wire) capabilities to help maintain network connectivity during power failures or appliance disruptions. The Terra 1G provides 1GbE RJ-45 copper connectivity, while the Terra 10G supports 10GbE SFP+ fiber connectivity and features dual redundant 150W power supplies for enhanced hardware availability.

Software Editions — 1G, 4G, 6G, and 10G

TerraFlow Intelligence Guard Software delivers the platform's core threat intelligence and network security capabilities through a software-based deployment model.

Available in four licensed throughput tiers—1 Gbps, 4 Gbps, 6 Gbps, and 10 Gbps—the software editions provide flexible capacity options for different network environments. Processing performance depends on the underlying system resources, deployment configuration, and traffic characteristics.

Unlike the hardware appliances, software editions do not include integrated physical network bypass interfaces or redundant power supplies. Network redundancy and availability depend on the underlying deployment infrastructure.

Core Security Capabilities

Across both hardware and software editions, TerraFlow Intelligence Guard provides the following security capabilities:

- Inbound Threat Protection: Detects and blocks connections from source IP addresses associated with network scanning, brute-force attacks, botnets, and other known malicious activity.
- Outbound Threat Prevention: Prevents infected internal endpoints from communicating with known malicious IP addresses and domains associated with malware distribution, phishing, and command-and-control (C2) infrastructure.
- DNS-to-Connection Correlation: Correlates observed DNS queries with subsequent network connections to identify suspicious destination activity and potential attempts to bypass enterprise DNS monitoring.

- Security Infrastructure Optimization: Reduces the volume of known malicious traffic reaching downstream security controls, including next-generation firewalls (NGFWs) and intrusion prevention systems (IPS), helping improve overall security efficiency.

Key Features

Core Platform Capabilities — Hardware and Software

- High-Performance Traffic Processing: Supports real-time network traffic analysis and threat intelligence matching, with processing capacity determined by the hardware model or licensed software throughput tier.
- Large-Scale Threat Intelligence: Enables IP and domain-based IoC matching against extensive threat intelligence datasets, continuously updated by the TerraFlow AI Defense Center.
- Active Threat Mitigation: Provides real-time inline blocking, proactive alerting, and comprehensive security reporting.
- Advanced Policy Enforcement: Supports DNS-to-connection correlation and granular Geo-IP policy enforcement to reduce exposure to known threats.
- Deep Network Visibility: Extracts network metadata, including DNS logs and NetFlow records, to support traffic analysis and security investigations.
- Secure Administration: Supports encrypted management protocols, including HTTPS with TLS 1.2/1.3, SSH, and XML over SFTP.

Hardware Appliance Features — Terra 1G and Terra 10G

- Enterprise-Grade Rack-Mount Design: Purpose-built 19-inch, 1U security appliances for enterprise network environments.
- Integrated Hardware Bypass: Provides fail-to-wire functionality to help maintain network connectivity during appliance or power failures.
- Dedicated Network Interfaces: Offers 1GbE RJ-45 copper interfaces on Terra 1G and 10GbE SFP+ fiber interfaces on Terra 10G.
- Redundant Power Protection: Terra 10G features dual redundant 150W power supplies to improve hardware availability.
- High-Capacity IoC Processing: Supports up to 1 million IP/domain IoCs on Terra 1G and up to 3 million on Terra 10G.

Software Edition Features — 1G, 4G, 6G, and 10G

- Flexible Software Deployment: Delivers TerraFlow Intelligence Guard security capabilities through software-based installations without requiring a dedicated TerraFlow hardware appliance.
- Throughput-Based Licensing: Offers four licensed processing tiers—1 Gbps, 4 Gbps, 6 Gbps, and 10 Gbps—to accommodate different network capacity requirements.
- Scalable Security Capacity: Enables organizations to select an appropriate software license tier based on network traffic requirements and available computing resources.
- Independent Infrastructure Management: Relies on the underlying deployment environment for computing resources, network connectivity, redundancy, and availability.

Continuous Threat Intelligence and Support

Both hardware and software editions require an applicable TerraFlow AI Defense Center subscription to receive continuous threat intelligence updates and associated support services.

Hardware Appliances

Product	Terra 1G	Terra 10G
Network Interface	1G RJ-45 x 8	10/1G SFP+ x8
Hardware Bypass	1G RJ45 pair x2	10G MM pair x2
Management Interface	1GbE RJ45x1,HTTPS TLS 1.2/1.3,CLI,XML over sFTP	
System Console	SSH	
Network Management	SNMPv2c,SNMPv3	
Meta Extraction	DNS log/Netflow	
IoC(IP/Domain) Capacity	1M	3M
Power Supply	Single Power 100W100-240VAC	Dual Power 150W 100-240VAC
Operating	0~40°C	0~40°C

Ordering Information

Terra 10G

- **SYS-TERRA-10G**

  Terra 10G Security Appliance with 8 10/1G SFP+ Ethernet ports and 2 10G MM Hardware Bypass pairs. Requires purchase of TerraFlow AI Defense Center subscription.

- **SUB-TERRA-10G-ESSENTIAL**

  Annual Subscription for TerraFlow AI Defense Center Intelligence License for Terra 10G. Required for full functionality. Includes continuous threat intelligence updates, Advanced Hardware Replacement (RMA), and Technical Support.

Terra 1G

- **SYS-TERRA-1G**

  Terra 1G Security Appliance with 8 1G RJ-45 Copper Ethernet ports and 2 1G RJ-45 Hardware Bypass pairs. Requires purchase of TerraFlow AI Defense Center subscription.

- **SUB-TERRA-1G-ESSENTIAL**

  Annual Subscription for TerraFlow AI Defense Center Intelligence License for Terra 1G. Required for full functionality. Includes continuous threat intelligence updates, Advanced Hardware Replacement (RMA), and Technical.

Software Editions

LIC-TERRA-1G

TerraFlow Intelligence Guard Software 1G License

Software license for TerraFlow Intelligence Guard with licensed traffic processing throughput of up to 1 Gbps. Supports real-time IP and domain-based threat detection and blocking, Geo-IP policy enforcement, DNS-to-connection correlation, DNS log extraction, and NetFlow analysis. Requires a separate annual TerraFlow AI Defense Center service subscription.

LIC-TERRA-4G

TerraFlow Intelligence Guard Software 4G License

Software license for TerraFlow Intelligence Guard with licensed traffic processing throughput of up to 4 Gbps. Supports real-time IP and domain-based threat detection and blocking, Geo-IP policy enforcement, DNS-to-connection correlation, DNS log extraction, and NetFlow analysis. Requires a separate annual TerraFlow AI Defense Center service subscription.

LIC-TERRA-6G

TerraFlow Intelligence Guard Software 6G License

Software license for TerraFlow Intelligence Guard with licensed traffic processing throughput of up to 6 Gbps. Supports real-time IP and domain-based threat detection and blocking, Geo-IP policy enforcement, DNS-to-connection correlation, DNS log extraction, and NetFlow analysis. Requires a separate annual TerraFlow AI Defense Center service subscription.

LIC-TERRA-10G

TerraFlow Intelligence Guard Software 10G License

Software license for TerraFlow Intelligence Guard with licensed traffic processing throughput of up to 10 Gbps. Supports real-time IP and domain-based threat detection and blocking, Geo-IP policy enforcement, DNS-to-connection correlation, DNS log extraction, and NetFlow analysis. Requires a separate annual TerraFlow AI Defense Center service subscription.

Ordering Information — Software Licenses

TerraFlow Intelligence Guard Software

- **LIC-TERRA-1G**

  TerraFlow Intelligence Guard Software License, up to 1 Gbps licensed throughput. Requires an annual TerraFlow AI Defense Center service subscription.
- **LIC-TERRA-4G**

  TerraFlow Intelligence Guard Software License, up to 4 Gbps licensed throughput. Requires an annual TerraFlow AI Defense Center service subscription.
- **LIC-TERRA-6G**

  TerraFlow Intelligence Guard Software License, up to 6 Gbps licensed throughput. Requires an annual TerraFlow AI Defense Center service subscription.
- **LIC-TERRA-10G**

  TerraFlow Intelligence Guard Software License, up to 10 Gbps licensed throughput. Requires an annual TerraFlow AI Defense Center service subscription.

Ordering Information — Annual Service Subscriptions

TerraFlow AI Defense Center Essential Services

- **SUB-TERRA-SW-1G-ESSENTIAL**

  Annual TerraFlow AI Defense Center Essential Service Subscription for Intelligence Guard Software 1G. Includes continuous threat intelligence updates, software updates, maintenance releases, and technical support.
- **SUB-TERRA-SW-4G-ESSENTIAL**

  Annual TerraFlow AI Defense Center Essential Service Subscription for Intelligence Guard Software 4G. Includes continuous threat intelligence updates, software updates, maintenance releases, and technical support.
- **SUB-TERRA-SW-6G-ESSENTIAL**

  Annual TerraFlow AI Defense Center Essential Service Subscription for Intelligence Guard Software 6G. Includes continuous threat intelligence updates, software updates, maintenance releases, and technical support.
- **SUB-TERRA-SW-10G-ESSENTIAL**

  Annual TerraFlow AI Defense Center Essential Service Subscription for Intelligence Guard Software 10G. Includes continuous threat intelligence updates, software updates, maintenance releases, and technical support.

Ordering Notes

- Software licenses and annual service subscriptions are ordered separately.
- Each software license requires a corresponding annual service subscription for continuously updated threat intelligence services.
- Licensed throughput defines the maximum permitted traffic processing capacity. Actual performance depends on deployment hardware, traffic characteristics, and enabled features
- Software deployment requirements, high-availability licensing, and applicable service-level agreements are subject to vendor specifications.

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