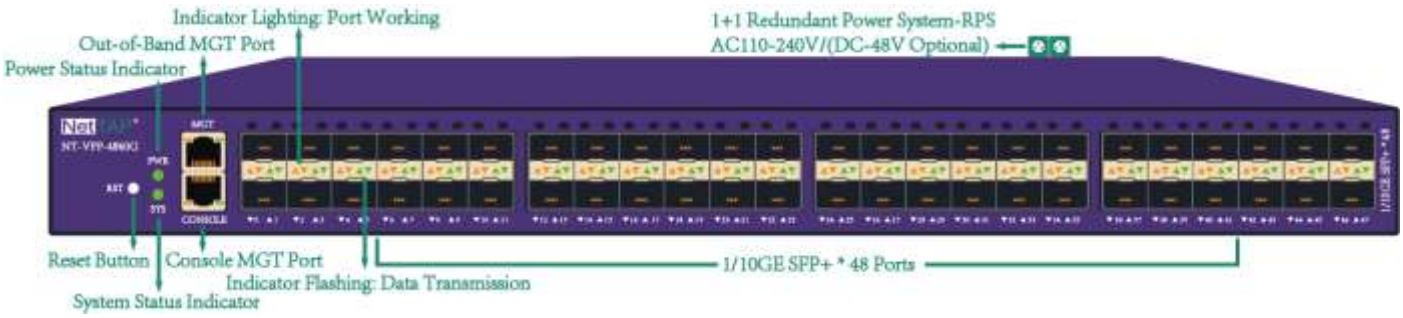
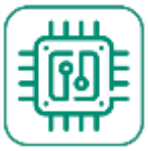
1- Overviews

- A full visual control of Data Acquisition device(48ports * 10GE SFP+ port)
- A full Data Scheduling Management device(Max 24*10GE ports duplex Rx/Tx processing)
- A full pre-processing and re-distribution device(bidirectional bandwidth 480Gbps)
- Supported collection & reception of link data from different network element locations
- Supported collection & reception of link data from different exchange routing nodes
- Supported raw packet collected, identified, analyzed, statistically summarized and marked
- Supported raw packet output for monitoring equipment of BigData Anlysis, Protocol Analysis, Signaling Analysis, Security Analysis, Risk Management and other required traffic.
- Supported real-time packet capture analysis, data source identification, and real-time/historical network traffic search



2- Intelligent Traffic Processing Abilities



ASIC Chip Plus Multicore CPU

480Gbps intelligent traffic processing capabilities

10GE Acquisition

*10GE 48 ports, Max 24*10GE ports Rx/Tx duplex processing, up to 480Gbps Traffic Data Transceiver at same time, for network Data Acquisition, simple Pre-processing*

Data Replication

Packet replicated from 1 port to multiple N ports, or multiple N ports aggregated, then replicated to multiple M ports

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Data Aggregation

Packet replicated from 1 port to multiple N ports, or multiple N ports aggregated, then replicated to multiple M ports

Data Distribution

Classified the incoming metdata accurately and discarded or forwarded different data services to multiple interface outputs according to user's predefined rules.

Data Filtering

Supported flexible combination of metdata elements based on Ethernet Type, VLAN Tag, TTL, IP Septum, IP Fragmentation, TCP Flag, and other Packet Features

Load Balance

Supported load balance Hash algorithm and session-based weight sharing algorithm according to L2-L7 layer characteristics to ensure that the port output traffic dynamic of load balancing

UDF Match

Supported the matching of any key field in the first 128 bytes of a packet. Customized the Offset Value and Key Field Length and Content, and determining the traffic output policy according to the user configuration

VLAN Tagged

VLAN Untagged

Supported the matching of any key field in the first 128 bytes of a packet. The user can customize the offset value and key field length and content, and determine the traffic output policy according to the user configuration.

VLAN Replaced

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MAC Address Replacement

Supported the replacement of the destination MAC address in the original data packet, which can be implemented according to the user's configuration

3G/4G Mobile Protocol Recognition/Classfication

Supported to identify mobile network elements such as (Gb, Gn, IuPS, S1-MME, S1-U, X2-U, S3, S4, S5, S6a, S11, etc. interface). You can implement traffic output policies based on features such as GTPV1-C, GTPV1-U, GTPV2-C, SCTP, and S1-AP based on user configurations.

IP Datagram Reassembly

Supported IP fragmentation identification and supports reassembly of IP fragmentation so as to implement L4 feature filtering on all IP fragmentation packets. Implement traffic output policy.

Ports Healthy Detection

Supported real-time detection of the service process health of the back-end monitoring and analysis equipment connected to different output ports. When the service process fails, the faulty device is automatically removed. After the faulty device is recovered, the system automatically returns to the load balancing group to ensure the reliability of multi-port load balancing.

Time Stamping

Supported to synchronize the NTP server to correct the time and write the message into the packet in the form of a relative time tag with a timestamp mark at the end of the frame, with the accuracy of nanoseconds

VxLAN, VLAN, MPLS Untagged

Supported the VxLAN, VLAN, MPLS header in the original data packet is stripped and output.

Data De-duplication

Supported port-based or policy-level statistical granularity to compare multiple collection source data and repeats of same data packet at a specified time. Users can choose different packet identifiers (dst.ip, src.port, dst.port, tcp.seq, tcp.ack)

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Data Slicing

Supported policy-based slicing (64-1518 bytes optional) of the raw data, and the traffic output policy can be implemented based on user configuration

Classified Data Hidden

Supported policy-based granularity to replace any key field in the raw data in order to achieve the purpose of shielding sensitive information. According to user configuration, the traffic output policy can be implemented.

Tunneling Protocol Identify

Supported automatically identify various tunneling protocols such as GTP / GRE / PPTP / L2TP / PPPOE. According to the user configuration, the traffic output strategy can be implemented according to the inner or outer layer of the tunnel

APP Layer Protocol Identify

Supported commonly used application layer protocol identification, such as FTP, HTTP, POP, SMTP, DNS, NTP, BitTorrent, Syslog, MySQL, MsSQL and so on

Video Traffic Filtering

Supported to filter and mitigate the video stream data matching such as domain name address resolution, video transmission protocol, URL and video format, to offer useful data to analyzers and monitors for security.

Packet Capturing

Supported port-level, policy-level packet capture from source physical ports within filter of Five-Tuple field in real time

Real-time Traffic Trend Monitoring

Supported real-time monitoring and statistics on port-level and policy-level data traffic, to show the RX / TX rate, receive / send bytes, No., RX / TX the number of errors, the maximum income / hair rate and other key indicators.

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Traffic Trend Alarming

Supported port-level, policy-level data traffic monitoring alarms by setting the alarm thresholds for each port and each policy flow overflow.

Historical Traffic Trend Review

Supported port-level, policy-level nearly 2 months of historical traffic statistics query. According to the days, hours, minutes and other granularity on the TX/RX rate, TX/RX bytes, TX/RX messages, TX/RX error number or other information to query select.

Packet Analysis

Supported the captured datagram analysis, including abnormal datagram analysis, stream recombination, transmission path analysis, and abnormal stream analysis

NetTAP® Visibility Platform

Supported NetTAP® Matrix-SDN Visual Control Platform Access

1+1 Redundant Power System(RPS)

Supported 1+1 Dual Redundant Power System

3- Typical Application Structures

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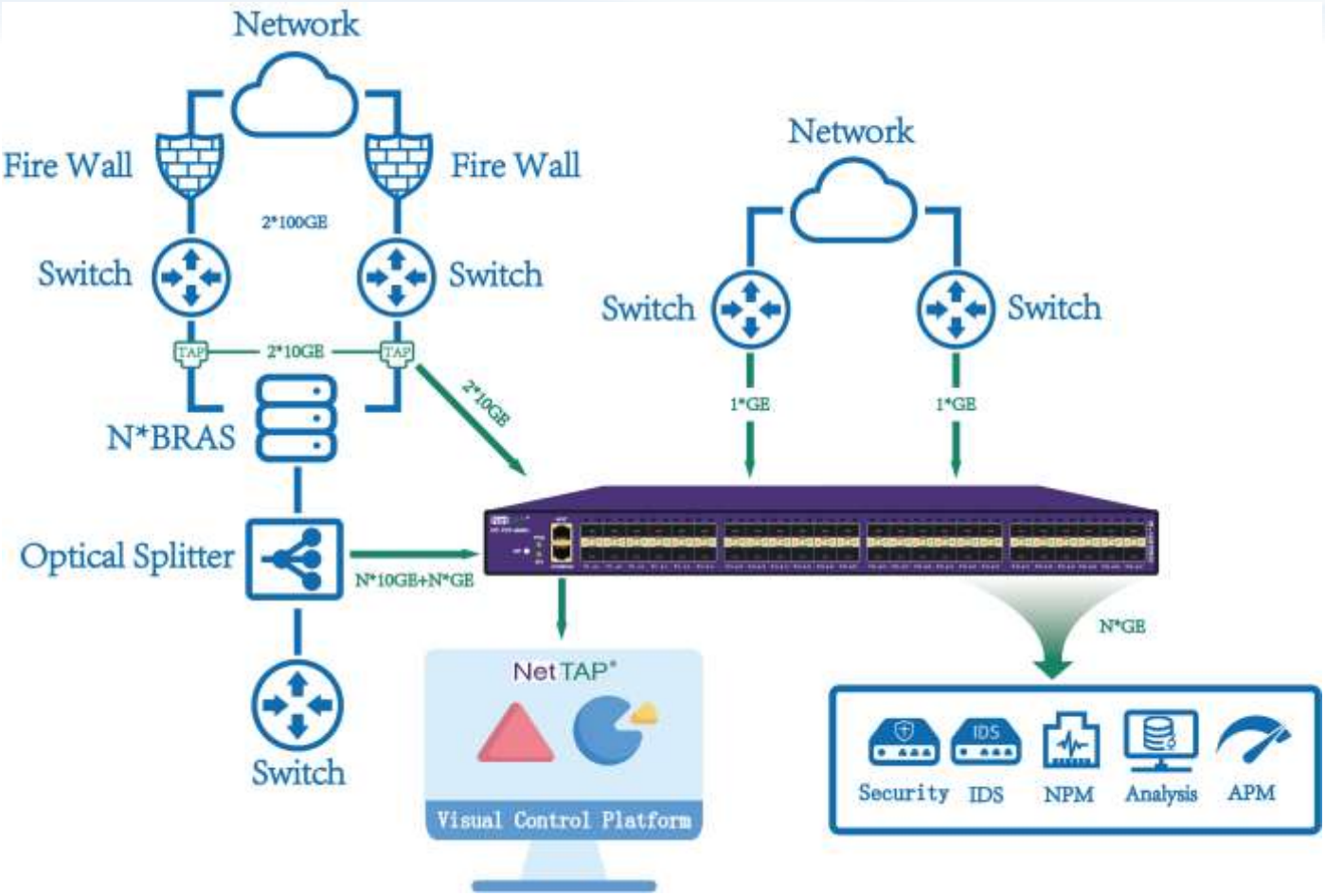
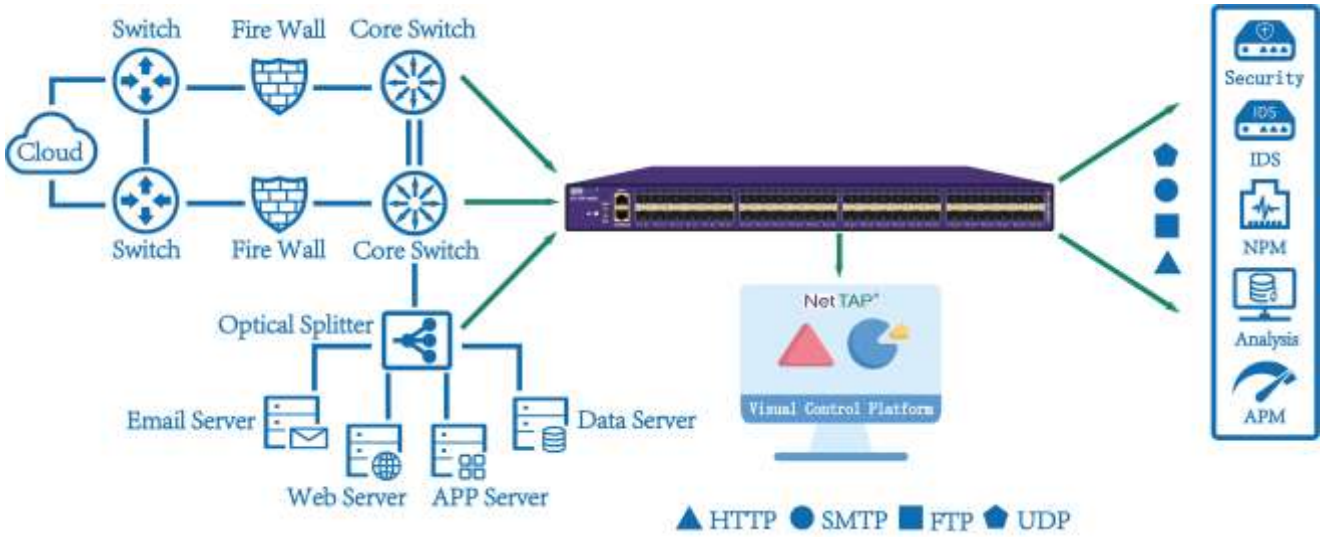
3.1 Centralized Collection Application(as following)



3.2 Unified Schedule Application(as following)



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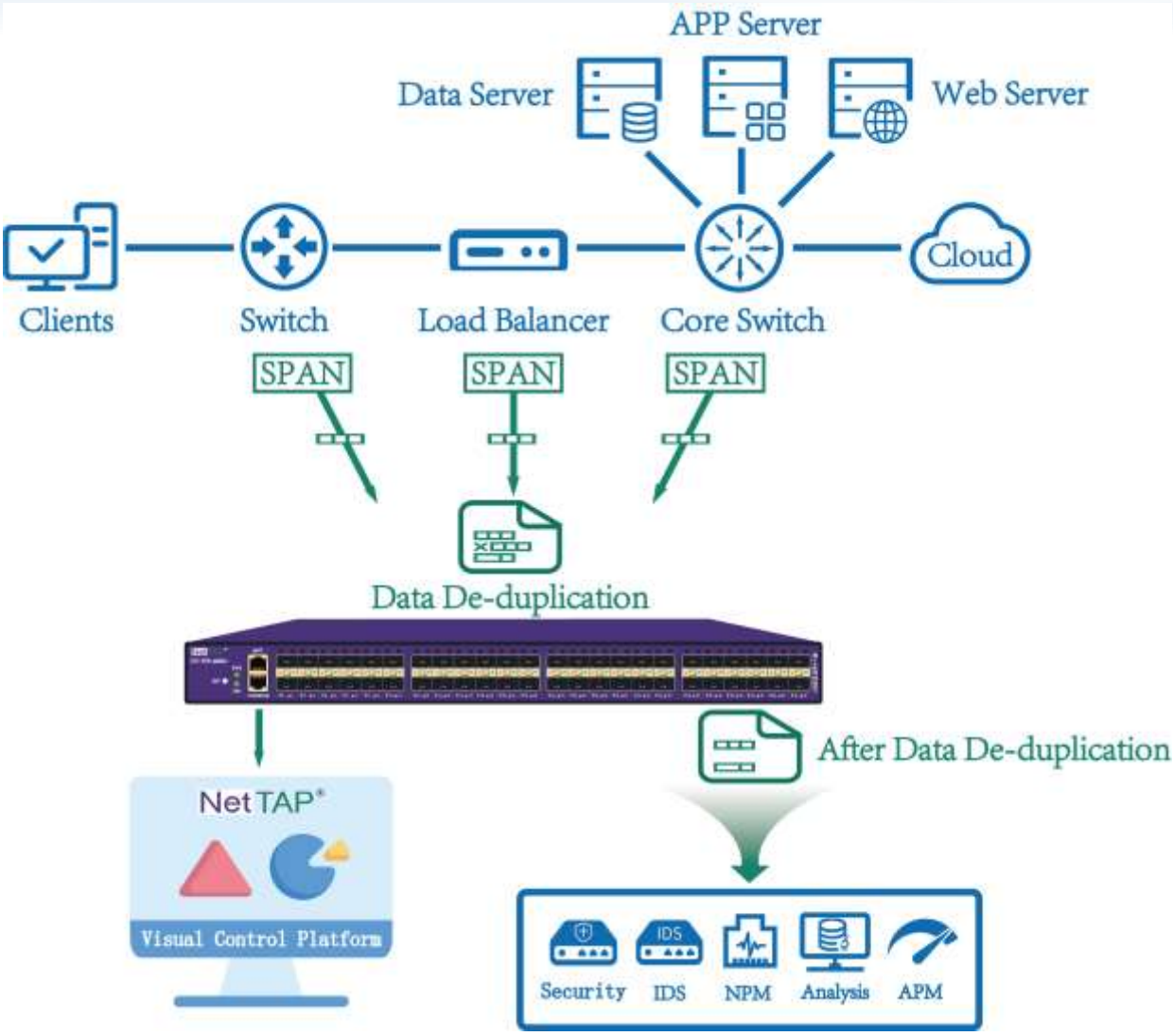
3.3 Data De-duplication Application(as following)



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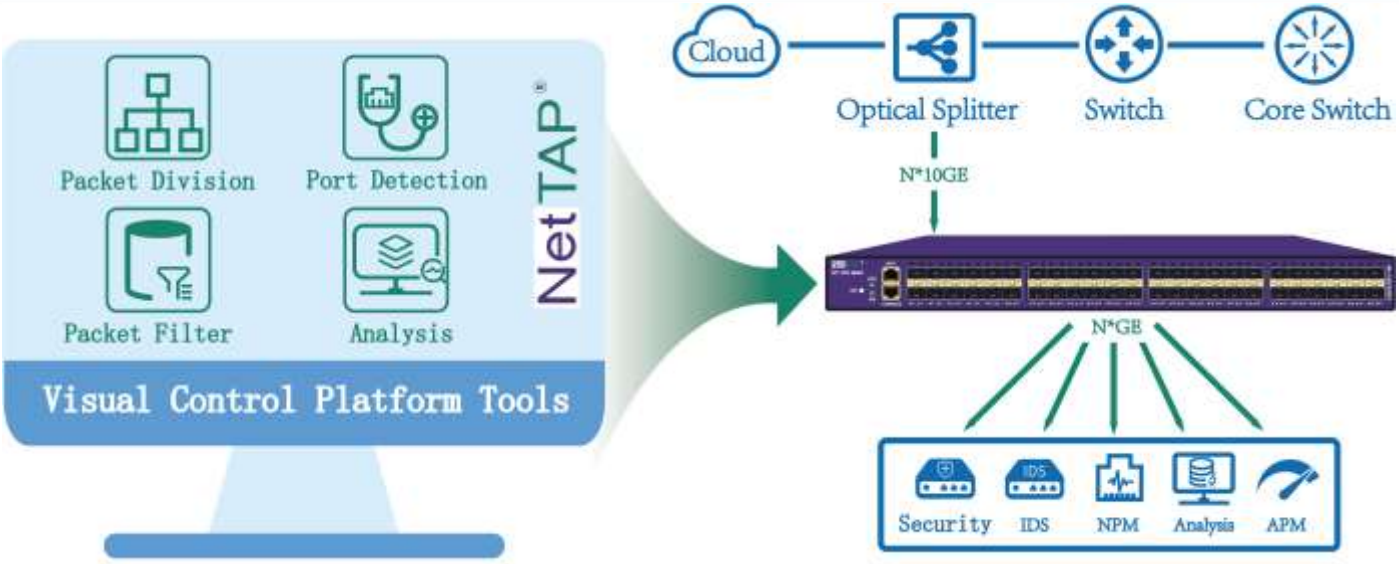
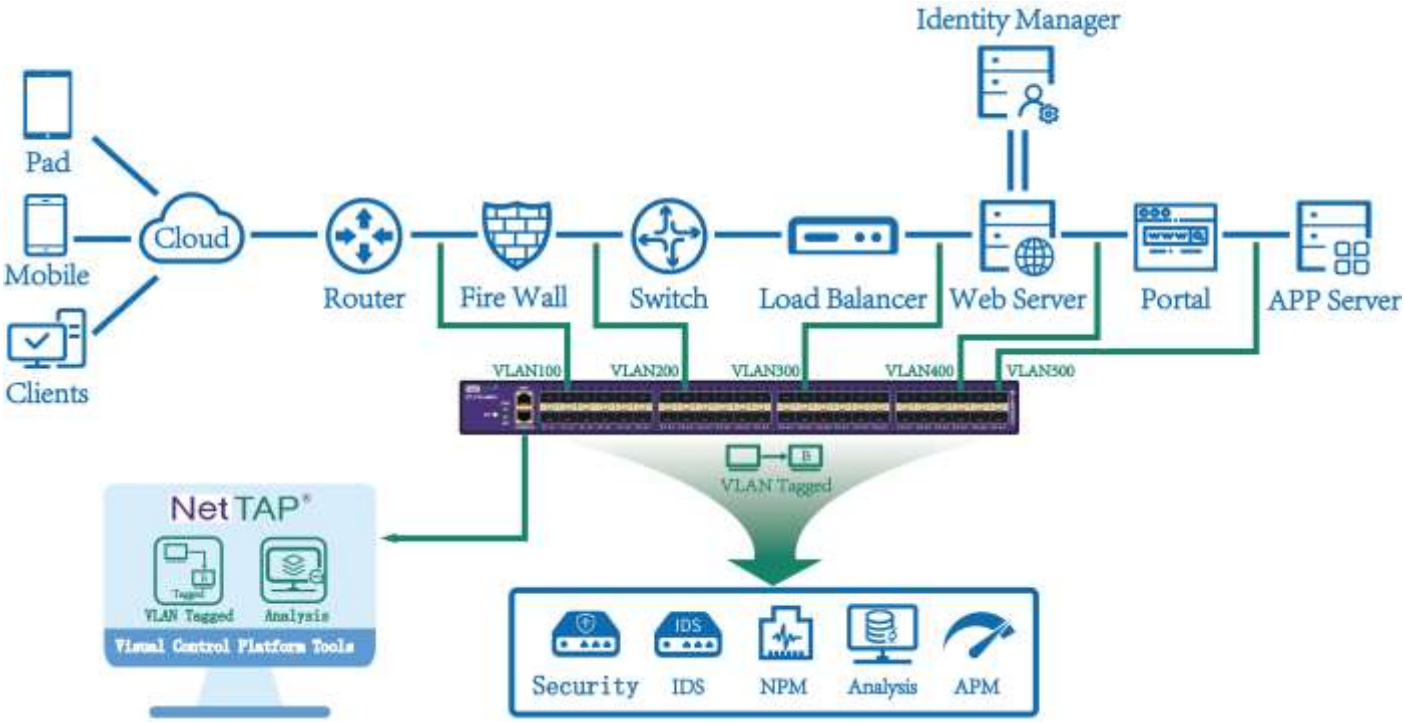
3.4 Data Acquisition/Detection Application and Visual Control Platform Tools(as following)



3.5 Data VLAN Tagged Application(as following)



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4- Specifications

NT-VPP-4860G NetTAP® NPB Functional Parameters			
Network Interface		10GE	48*SFP+ slots, support 10GE/GE; Support Single/Multiple mode fiber
		Out-of-Band MGT Interface	1*10/100/1000M electrical port;
Deployment Mode		Optical	support
		Mirror Span	support
System Function	Basic Traffic Processing	Traffic Replication/aggregation/distribution	support
		Based on IP / protocol / port seven-tuple traffic identification filtering	support
		UDF match	support
		VLAN mark/replace/delete	support
		3G/4G Protocol identification	support
		Interface health inspection	support
		Ethernet encapsulation unrelated support	support
		Processing ability	480Gbps
	Intelligent Traffic Processing	Time-stamping	support
		Tag remove	Support VxLAN、VLAN、MPLS header stripping
		Data de-duplication	Support interface/policy
		Packet slicing	Support policy
		Data desensitization	Support policy
		Tunneling reorganization	support
		Application layer protocol identification	Support FTP/HTTP/POP/SMTP/DNS/NTP/ BitTorrent/SYSLOG/MYSQL/MSSQL and so on
		Video traffic recognition	support
		Processing ability	40Gbps
	Diagnosis and Monitoring	Real-time monitor	Support interface/policy
		Traffic alarm	Support interface/policy
		Historical traffic review	Support interface/policy
		Traffic capture	Support interface/policy
	Traffic Visibility	Basic Analysis	Support summary statistical presentation of basic information such

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	Detection		as Packet Count, Packet Class Distribution, Session Connection Number, Packet protocol Distribution, etc.
		DPI Analysis	Support transport layer protocol proportion analysis, unicast broadcast multicast proportion analysis, IP traffic proportion analysis, DPI application proportion analysis. Support data content based on sampling time of traffic size analysis rendering. Support data analysis and statistics based on session flow.
		Accurate Fault Analysis	Support traffic data to provide different visual fault analysis and positioning, including: Message Transmission Behavior Analysis, Data Stream Level Fault Analysis, Packet Level Fault Analysis, Security Fault Analysis, Network Fault Analysis.
	Management	CONSOLE MGT	support
		IP/WEB MGT	support
		SNMP MGT	support
		TELNET/SSH MGT	support
		SYSLOG protocol	support
		User authentication	Based on user's password authentication
Electric(1+1 Redundant Power System-RPS)		Rate power supply voltage	AC110~240V/DC-48V(optional)
		Rate power supply frequency	AC-50HZ
		Rate input current	AC-3A / DC-10A
		Rate power	Max 250W
Environment		Working temperature	0—50℃
		Storage temperature	-20-70℃
		Working humidity	10%-95%，no condensation
User Configuration		Console configuration	RS232 interface, 115200,8,N,1
		Password authentication	support
Height of Chassis		(U)	1U 445mm*44mm*402mm

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5- Order Information

NT-VPP-4860G-24H	24*10GE/GE SFP+ Ports, 240Gbps
NT-VPP-4860G-48H	48*10GE/GE SFP+ Ports, 480Gbps
NT-VPP-4860G-SOFT-DIAG	NetTAP® Advanced Packet Detection/Diagnostic Software
NT-VPP-4860G-SOFT-PEX	NetTAP® Visual Control Processor Extend Ports Software

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