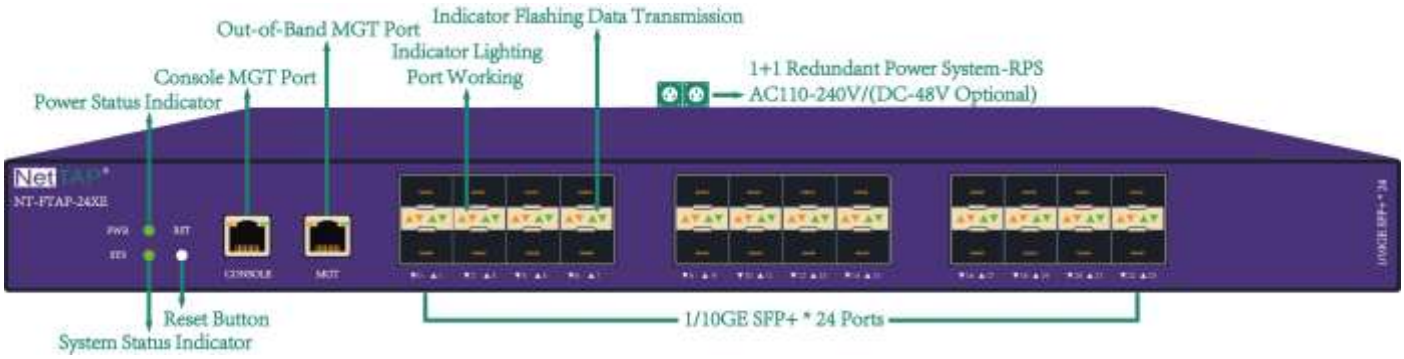
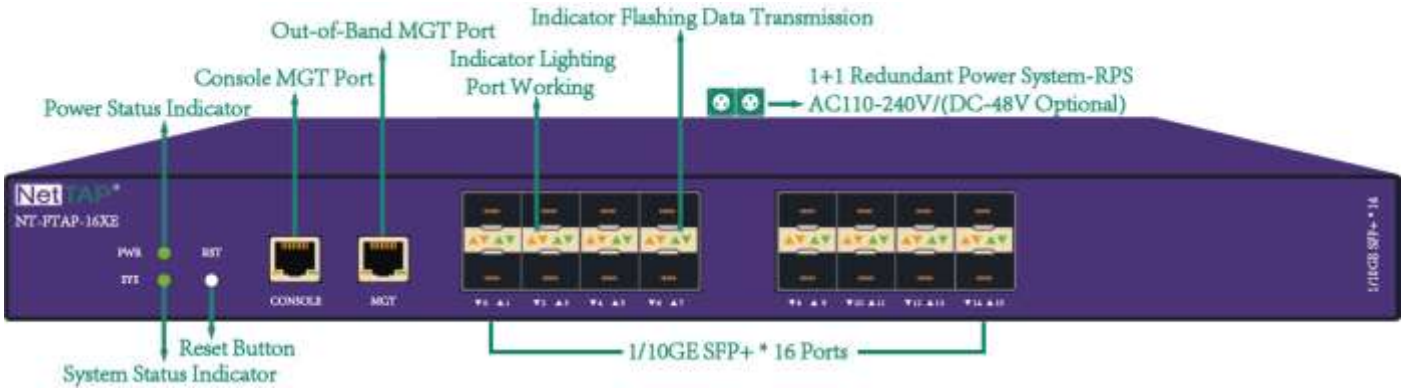
1- Overviews

- A full visual control of Data Acquisition device(8/16/24*10GE SFP+ ports)
- A full Data Scheduling Management device(duplex Rx/Tx processing)
- A full pre-processing and re-distribution device(bidirectional bandwidth 80/160/240Gbps)
- Supported collection & reception of link data from different network element locations
- Supported collection & reception of link data from different switch routing nodes
- Supported raw packet collected, identified, analyzed, statistically summarized and marked
- Supported to realize irrelevant upper packaging of Ethernet traffic forwarding, supported all kinds of Ethernet packaging protocols, and aslo 802.1q/q-in-q, IPX/SPX, MPLS, PPPO, ISL, GRE, PPTP etc. protocol packaging
- Supported raw packet output for monitoring equipment of BigData Analysis, Protocol Analysis, Signaling Analysis, Security Analysis, Risk Management and other required traffic.
- Supported real-time packet capture analysis, data source identification



NT-FTAP-24XE(above)



NT-FTAP-16XE (above)

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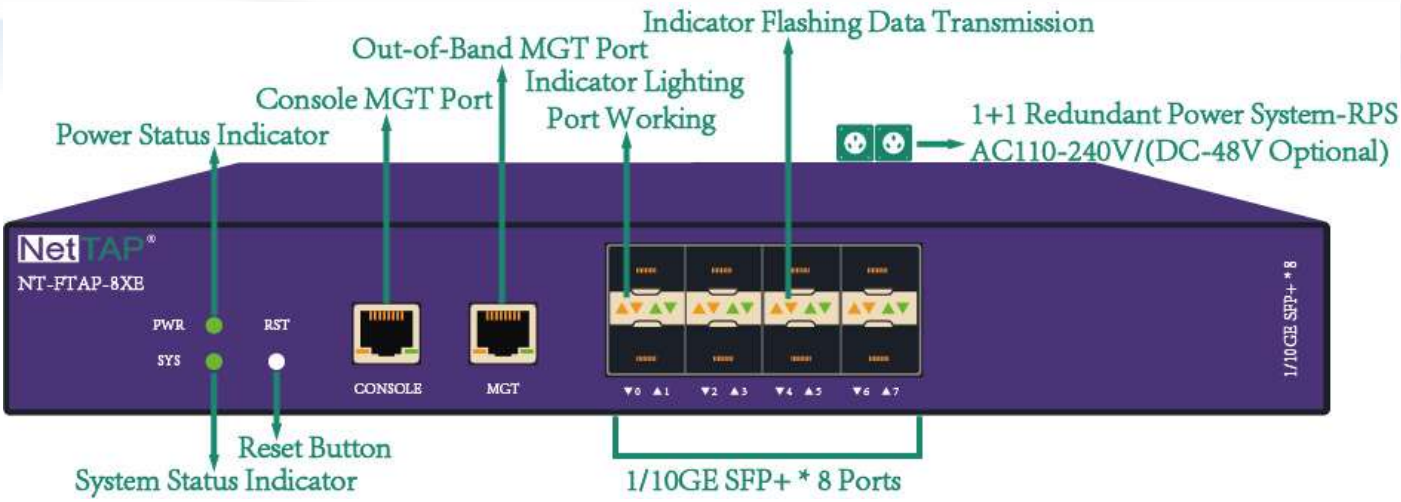
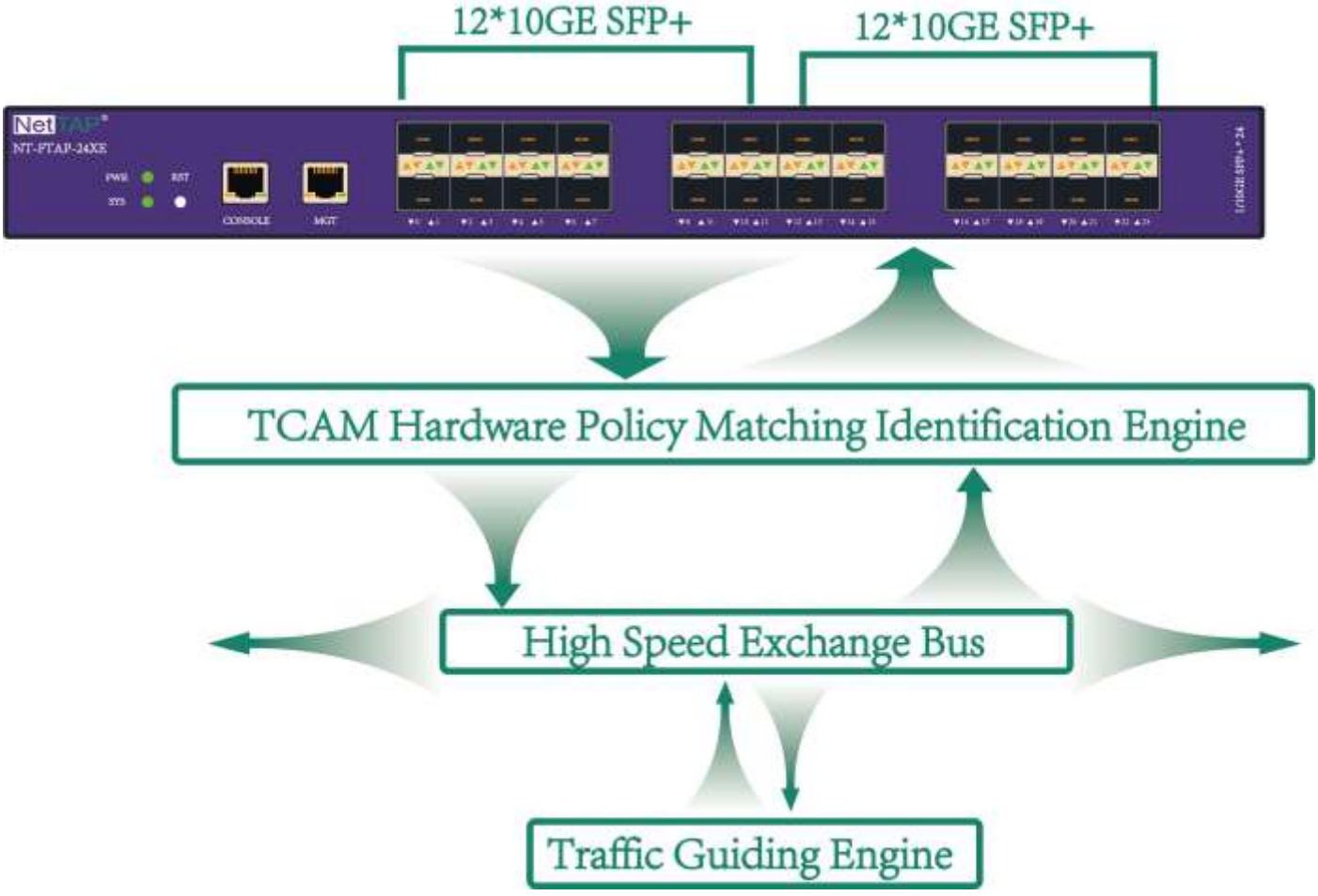


NT-FTAP-8XE (above)

2- System Block Diagram



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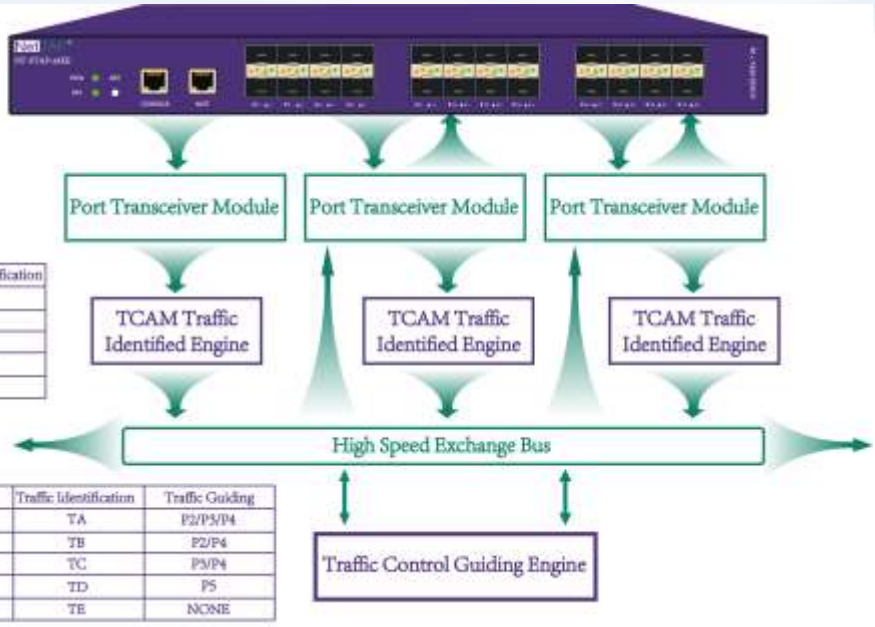
3- Operating Principle



Identify Rule	Layer2 Message	Layer3 Message	Layer4 Message	Traffic Identification
1	SMAC	IP.SRC	SPORT	TA
2	DMAC	IP.DST	DPORT	TB
3	PROTO	IP.TTL	TCP.SYN	TC
4	*	IP.PROTO	TCP.WIN	TD
5	*	IP.FRAGMENT	TCP.ACK	TE

Guiding Rule	Traffic Identification	Traffic Guiding
1	TA	P2/P3/P4
2	TB	P2/P4
3	TC	P3/P4
4	TD	P5
5	TE	NONE

4- Intelligent Traffic Processing Abilities

ASIC Chip Plus TCAM CPU

80/160/240Gbps intelligent traffic processing capabilities

10GE Acquisition

10GE 8/16/24 ports, Rx/Tx duplex processing, up to 80/160/240Gbps 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

Data Aggregation

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 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 L2-L7 packet filtering matching, such as SMAC, DMAC, SIP, DIP, Sport, Dport, TTL, SYN, ACK, FIN, Ethernet type field and value, IP protocol number, TOS, etc. also supported flexible combination of filtering rules.

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

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

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3G/4G Mobile Protocol Recognition/Classification

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.

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.

VLAN, MPLS Untagged

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

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

Unified Control Platform

Supported NetTAP® Matrix-SDN Visual Control Platform Access

1+1 Redundant Power System(RPS)

Supported 1+1 Dual Redundant Power System

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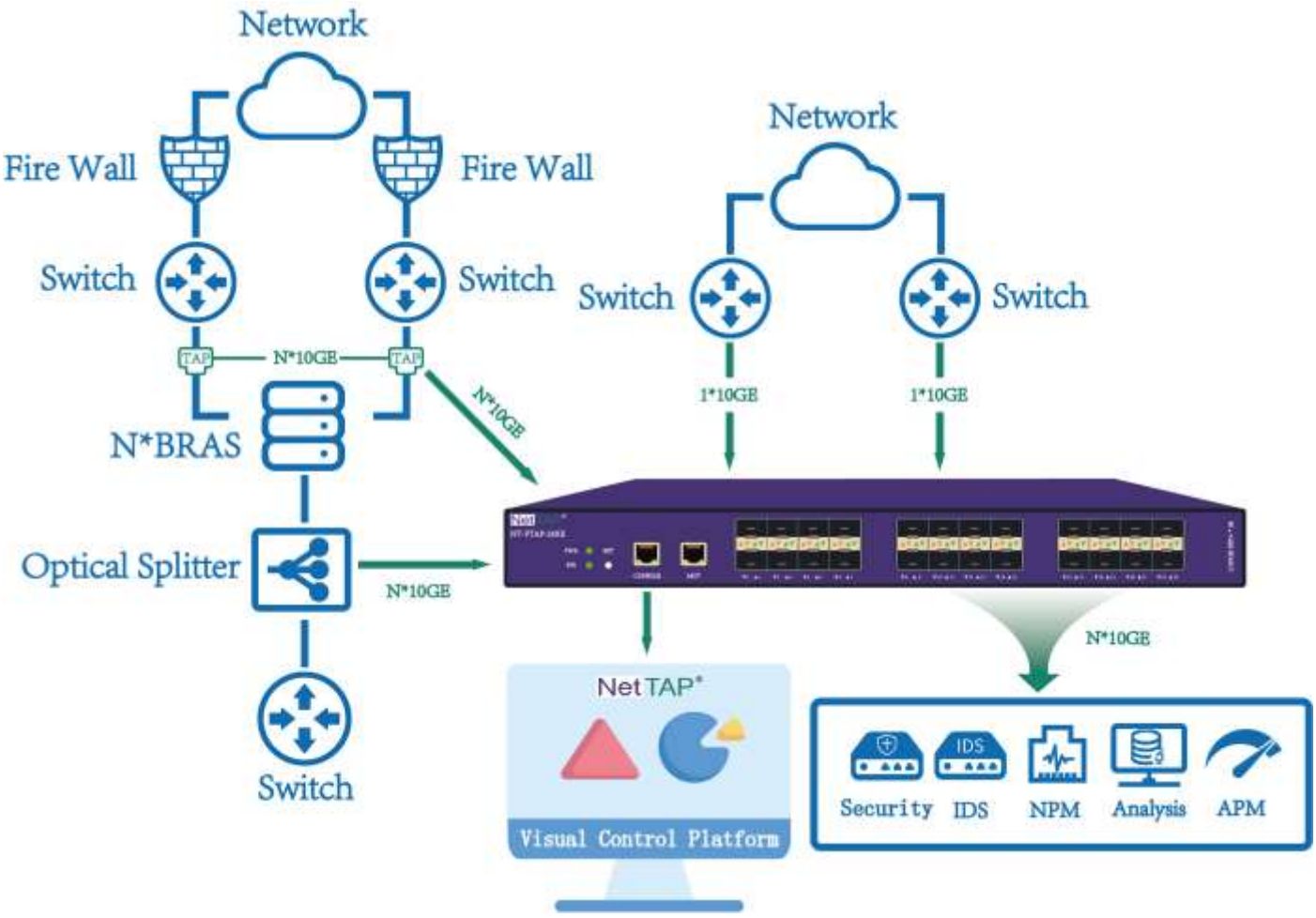
5- Typical Application Structures

5.1 N*10GE to 10GE Data Aggregation Application(as following)



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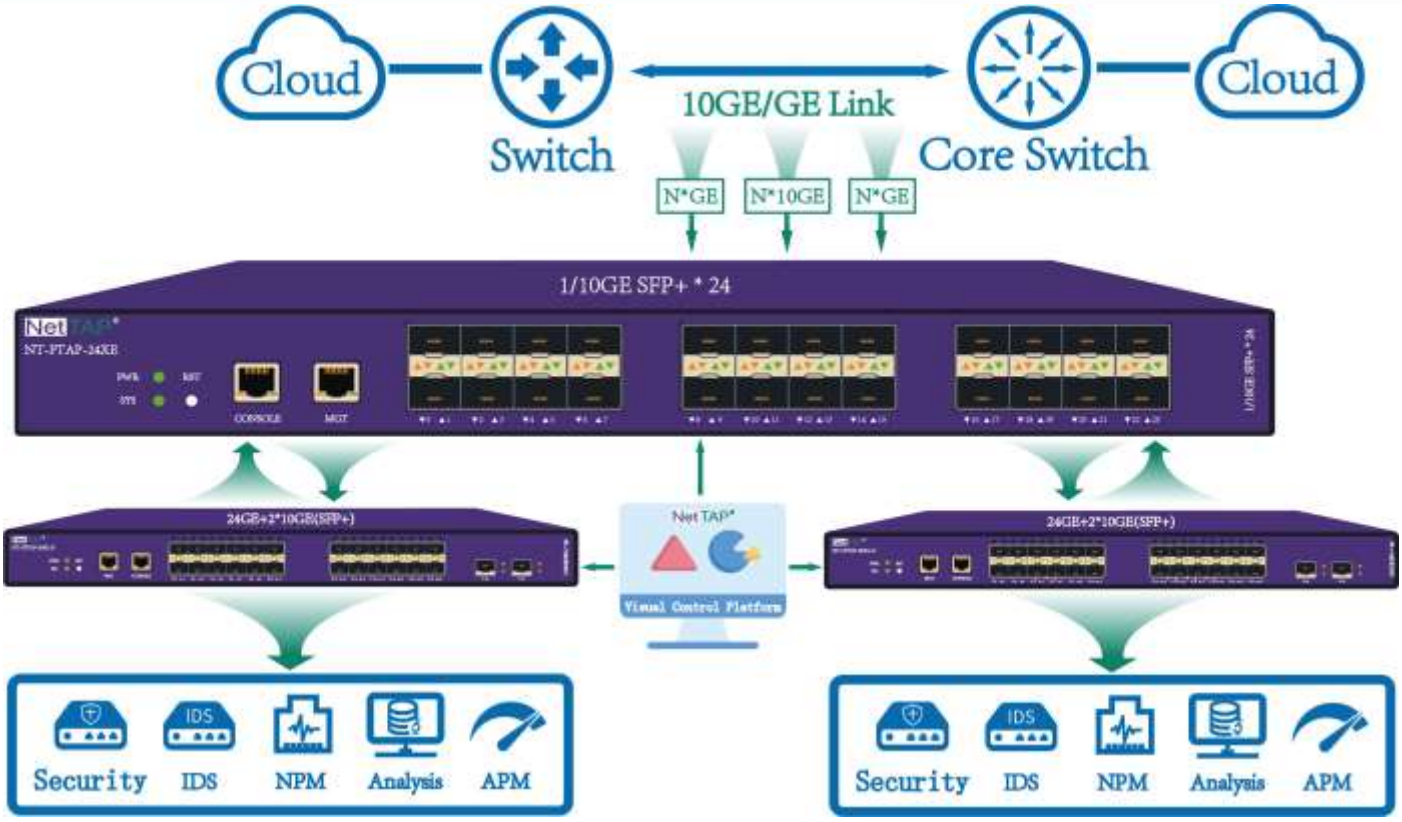
5.2 GE/10GE Hybrid Access Application(as following)



6- Specifications

NT-FTAP-8/16/24XE NetTAP® NPB Functional Parameters		
Network Interface	10GE	8/16/24*10GE/GE SFP+ slot; support single/multiple mode fiber
	Out-of-Band MGT interface	1*10/100/1000M electrical port
Deploy mode	10G optical splitting	Support 4/8/12*10G bidirectional link traffic acquisition；
	10G mirror acquisition	Support max to 8/16/24*10G mirror traffic inputting
	Optical inputting	Input port supports single fiber splitting input;
	Port multiplexing	Support input port as output port;
	Flow output	Support 8/16/24 channels of 10GE flow output;
	Traffic aggregating/duplicating/distribution	Support

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	QTYs of links supporting traffic duplicating/aggregating	1->N way traffic replication (N<8/16/24) N->1 channel traffic aggregation (N<8/16/24) Group G (M->N way) grouped traffic replication aggregation [G*(M+N) < 8/16/24]
	Port-based traffic identification diverting	Support
	port five tuple traffic identification diverting	Support
	Traffic identification divert strategy based on key tag of protocol header	Support
	Ethernet encapsulation unrelated support	support
	CONSOLE MGT	support
	IP/WEB MGT	support
	SNMP MGT	support
	TELNET/SSH MGT	support
	SYSLOG protocol	support
	User authentication	Based on users' 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	140W/150W/150W
Environment	Working temperature	0—50℃
	Storage temperature	-20-70℃
	Working humidity	10%-95%, no condensation
User Configuration	Console configuration	RS232 interface, 9600,8,N,1
	Password authentication	support
Height of Chassis	(U)	1U 445mm*44mm*402mm

7- Order Information

NT-FTAP-8XE	8*10GE/GE SFP+ ports, max 80Gbps
NT-FTAP-16XE	16*10GE/GE SFP+ ports, max 160Gbps
NT-FTAP-24XE	24*10GE/GE SFP+ ports, max 240Gbps

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