



MAIN FEATURES	
P/N	XPTN-9000-87-4GX16GP2B-VX
Fixed port	4*1000 Base-X, 16*10/100/1000 Base-T
Management	Yes
PoE Support	Yes
Input Voltage	DC 48-58V
ESD	IEC 61000-4-2 Level 4 (8K/15K)
Thermal methods	Fanless design, natural cooling
MTBF	100,000 hours
Certificates	CCC/CE/FCC/RoHS

## **SPECIFICATION**

Provider Mode Ports		
Business interface (Fixed port)	4*1000 Base-X, 16*10/100/1000 Base-T	
Management Port	Support console	
Power interface	Phoenix terminal, dual power supply redundancy	
LED lights (LED Indicators)	PWR, Link/ACT LED	
Cable type&Transmission distance		
Twisted-pair	0-100m (CAT5e,CAT6)	
Monomode optical fiber	20/40/60/80/100 Km	
Multimode optical fiber	550 m	
Network Topology		
Ring topology	Support	
Star topology	Support	
Bus topology	Support	
Tree Topology	Support	
Hybrid topology	Support	
Electrical Specifications		
Input voltage	DC 48-58V	
Total Power consumption	<386W	
PoE Support		
PoE port	1-16	
PoE Protocol	802.3af, 802.3at, 802.3bt (1-2 interface Supports up to 90W)	
PoE pin assignment	1,2,3,6; bt pins 1-8	
PoE management	UnSupport	
Layer 2 Switching		
Switching capacity	68G	

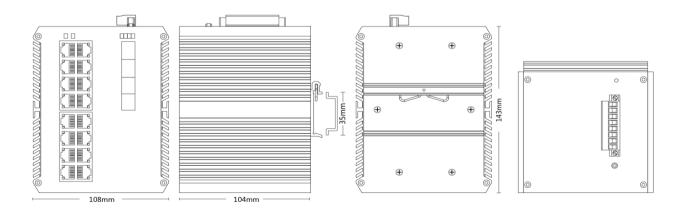
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MAC address table   16K   Support 4K   Support 5K   Support 5K   Support 5K   Support 5K   Support 5K   Support 6K   Support 6K   Support 6K   Support 6K   Support 7K   Sup	Packet forwarding rate	50.59 Mpps
Buffer 12M Forwarding delay <10 µs MDX/MIDX Support Flow control Support Jumbo Frame Support 10 Kbytes Spanning Tree Protocol Support SPRSTP/MSTP King Protocol Support 12 groups Multicast Support Multicast Multicast Support Multicast Multicast Support Multicast Multicast Support Multicast Multicas	MAC address table	16K
Forwarding delay <10 us  MDX/MIDX  Support  Flow control Support  Support 10 Kbytes  Spanning Tree Protocol Support 57F/RSTP/MSTP  Ring Protocol Support 12 groups  Multicast Support 18 groups  Multicast Support 18 groups  Storm Control Support  Storm Control Support  Storm Control Support  Readius/Mac certification Support  Readius/Mac certification Support  Remon Support  MTP client Support  DHCP sinooping Support  DHCP snooping Support  DHCP snooping Support  Support  Support Support  Support  Support Support  Support  Management CLUI Support  Management P Support  Support Support  Support  Support Support  Support Support  Support  Support Support P Standard ACL; Support MAC extended ACL; Support IP extended ACL  Support Coorse extended ACL  Support Qos're-marking and priority mapping; Support SP, WiRR queue scheduling; Support sertenace speed limit and exit speed limit; Support flow-based Qos'  Management  Command line (CU)  Management  Support  WEB management  Support  Supp	VLAN Support	Support 4K
MDX/MIDX  Support Flow control  Support Sypport MAC extended ACL; Sypport IP extended ACL; Sypport IP extended ACL Sypport Syp	Buffer	12M
Flow control  Jumbo Frame Support 10 Kbytes Spanning Tree Protocol Support STP/RSTP/MSTP  Ring Protocol Support 12 groups  Multicast Support IGMP Snooping Multicast Support IGMP Snooping Storm Control Support Storm Control Support Support Support Storm Control Support Siz static routes Convergence  Convergence  Support Qos're-marking and priority mapping: Support Support IP standard ACL; Supp	Forwarding delay	<10 μs
Jumbo Frame Support 10 kbytes  Spanning Tree Protocol Support STP/RSTP/MSTP  Ring Protocol Support RPS  Link Aggregation Support 12 groups  Multicast Support IGMP Snooping  Port Mirroring Support  Storm Control Support  Interface Counters Support  Radius/Mac certification Support  Radius/Mac certification Support  Radius/Mac certification Support  Rmon Support  Port Solation Support  Phor Brooping Support  Phic Pelient Support  DHCP client Support  DHCP client Support  DHCP snooping Support  Phig/tracert detection Support  Layer 3 Router  Static routing Support S12 static routes  Convergence  Quality of Service (QOS) Support Rough and priority mapping; Support Row-based QoS  Management  Command line (CLI) Support  Ver B management  Support  Support  Support  Support  Support  Support ACL 500; Support IP standard ACL; Support Row-based QoS  Management  Command line (CLI) Support  Support  Support  Support Support  Support	MDX/MIDX	Support
Spanning Tree Protocol Support STP/RSTP/MSTP Ring Protocol Support ERPS Link Agergaption Support 12 groups Multicast Support 18PN Soupport Storm Control Support Storm Control Support	Flow control	Support
Ring Protocol Link Aggregation Support 12 groups Multicast Support GMP Snooping Port Mirroring Support Storm Control Support Interface Counters Support QINQ Support Radius/Mac certification Support Radius/Mac certification Support Port Isolation Support Rmon NTP client Support DHCP client Support DHCP client Support ACL Soo; Support IP standard ACL; Support MAC extended ACL; Support IP extended ACL Support Service (QOS) Support ACL Soo; Support IP standard ACL; Support MAC extended ACL; Support IP extended ACL Support Cos re-marking and priority mapping; Support SP, WRR queue scheduling; Support Service (QOS) Support Cos re-marking and priority mapping; Support SP, WRR queue scheduling; SP, WRR queue scheduling; SP, WRR queue scheduling; SP, WRR queue schedu	Jumbo Frame	Support 10 Kbytes
Link Aggregation  Multicast  Support 12 groups  Multicast  Support  Storm Control  Support  Support  Support  Support  Support  Support  Mindrace Counters  Support  Support  Support  Support  Support  Support  Support  Radius/Mac certification  Support  Radius/Mac certification  Support  Rmon  Support  Rmon  Support  MTP client  Support  DHCP client  Support  DHCP snooping  Support  DHCP snooping  Support  DHCP snooping  Support  Dying gasp  Support  Support  Static routing  Support  Static routing  Support  Support  Suport  Suport Spoure  Static routing  Support Support IP standard ACL; Support NAC extended ACL; Support IP extended ACL  Quality of Service (QOS)  Support CoS re-marking and priority mapping: Support Sp. WRR queue scheduling: Support Sp. Sup	Spanning Tree Protocol	Support STP/RSTP/MSTP
Multicast Support IGMP Snooping Port Mirroring Support Storm Control Support Interface Counters Support QINQ Support Radius/Mac certification Support Port Isolation Support Rmon Support Rmon Support Rmon Support BHCP client Support BHCP shooping Support DHCP shooping Support Optical module DDM Support Layer 3 Router Static routing Support ACL 500; Support IP standard ACL; Support MAC extended ACL; Support IP standard ACL; Support Supp	Ring Protocol	Support ERPS
Port Mirroring Storm Control Support Interface Counters Support QINQ Support 802.1X Support Radius/Mac certification Support Rmon MTP client Support DHCP client Support DHCP snooping Support Optical module DDM Support Static routing Support Static routing Support Convergence  Access Control List (ACL) Support ACL 500; Support IP standard ACL; Support MAC extended ACL; Support IP extended ACL Support Oos re-marking and priority mapping; Support Support AG sependilinit; Support flow-based Qos  Management Command line (CLI) Support Management Support Support Support Support Support Support Support Support Support Oos re-marking and priority mapping; Support flow-based Qos  Management Command line (CLI) Support Management Support Management Support Management Support Support Support Management Support Management Support Supp	Link Aggregation	Support 12 groups
Storm Control  Interface Counters  Support  QINQ  Support  802.1X  Support  Radius/Mac certification  Support  Port Isolation  Support  Rmon  NTP client  Support  DHCP client  Support  DHCP snooping  Support  DHCP snooping  Support  Dying gasp  Support  Layer 3 Router  Convergence  Access Control List (ACL)  Support Support Support IP standard ACL; Support MAC extended ACL; Support IP extended ACL  Quality of Service (QOS)  Support  Support  Support  Support  Support Support Speed limit and exit speed limit; Support flow-based QoS  Management  Command line (CU)  Support  S	Multicast	Support IGMP Snooping
Interface Counters  Support  QINQ Support  802.1X Support  Radius/Mac certification Support  Port Isolation Support  Rmon Support  NTP client Support  DHCP snooping Support  Ping/tracert detection Support  Dying gasp Support  Optical module DDM Support  Support  Layer 3 Router  Static routing Support ACL 500; Support IP standard ACL; Support IP extended ACL; Support IP extended ACL  Quality of Service (QOS) Support  Support  Support Qos re-marking and priority mapping: Support SP, WRR queue scheduling; Supports entrance speed limit and exit speed limit; Support flow-based QoS  Management Command line (CLI) Support  Management Support  WEB management Support  Support	Port Mirroring	Support
QINQ Support  802.1X Support  Radius/Mac certification Support  Port Isolation Support  Rmon Support  NTP client Support  DHCP client Support  DHCP snooping Support  Pring/fracert detection Support  Optical module DDM Support  Layer 3 Router  Static routing Support Static routes  Convergence  Access Control List (ACL) Support ACL 500; Support IP standard ACL; Support MAC extended ACL; Support IP extended ACL  Quality of Service (QOS) Support	Storm Control	Support
802.1X     Support       Radius/Mac certification     Support       Port Isolation     Support       Rmon     Support       NTP client     Support       DHCP client     Support       DHCP snooping     Support       Ping/tracert detection     Support       Dying gasp     Support       Optical module DDM     Support       Layer 3 Router     Support S12 static routes       Convergence     Support ACL 500; Support IP standard ACL; Support MAC extended ACL; Support IP extended ACL       Quality of Service (QOS)     Support QoS re-marking and priority mapping; Support SP, WRR queue scheduling; Supports entrance speed limit and exit speed limit; Support flow-based QoS       Management     Support       Telnet /SSH     Support       WEB management     Support       Management IP     Support IPV4/IPV6       SNMP     Support SNMPV1/v2c/v3       User Management     Support       System Log     Support       File upgrade     Support	Interface Counters	Support
Radius/Mac certification Support  Rmon Support  Rmon Support  NTP client Support  DHCP client Support  DHCP snooping Support  Dying gasp Support  Optical module DDM Support  Static routing Support S12 static routes  Convergence  Access Control List (ACL) Support ACL 500; Support IP standard ACL; Support MAC extended ACL; Support iP standard ACL; Support Su	QINQ	Support
Port Isolation Support  Rmon Support  NTP client Support  DHCP client Support  DHCP snooping Support  Ping/tracert detection Support  Optical module DDM Support  Layer 3 Router  Static routing Support 512 static routes  Convergence  Access Control List (ACL) Support ACL 500; Support IP standard ACL; Support MAC extended ACL; Support IP extended ACL  Quality of Service (QOS) Support QoS re-marking and priority mapping; Support Sp, WRR queue scheduling; Supports entrance speed limit and exit speed limit; Support flow-based QoS  Management  Command line (CLI) Support  Management serial port (Console) Support  Telnet /SSH Support  Management P Support  Management P Support  Support SNMPV1/v2c/v3  User Management  Support  System Log Support  Support  Support  Support  Support  System Log Support	802.1X	Support
Rmon         Support           NTP client         Support           DHCP client         Support           DHCP snooping         Support           Ping/tracert detection         Support           Dying gasp         Support           Optical module DDM         Support           Layer 3 Router         Support S12 static routes           Convergence         Support ACL 500; Support IP standard ACL; Support MAC extended ACL; Support IP extended ACL           Quality of Service (QOS)         Support QoS re-marking and priority mapping; Support SP, WRR queue scheduling; Supports entrance speed limit and exit speed limit; Support flow-based QoS           Management         Support           Command line (CLI)         Support           Management serial port (Console)         Support           Telnet /SSH         Support           WEB management         Support           Management IP         Support SP, VRR queue scheduling; Support SP, WRR queue scheduling; Support flow-based QoS           SNMP         Support SP, VRR queue scheduling; Support flow-based QoS           SNMP         Support SP, VRR queue scheduling; Support flow-based QoS           SNMP         Support SP, VRR queue scheduling; Support SP, VRR queue scheduling; Support SP, VRR queue scheduling; Support S	Radius/Mac certification	Support
NTP client Support  DHCP client Support  DHCP snooping Support  Ping/tracert detection Support  Optical module DDM Support  Layer 3 Router  Static routing Support 512 static routes  Convergence  Access Control List (ACL) Support IP standard ACL; Support MAC extended ACL; Support IP extended ACL  Quality of Service (QOS) Support servance speed limit; Support flow-based QoS  Management  Command line (CLI) Support  Management serial port (Console) Support  WEB management Support  Management Support  Support Support  Support	Port Isolation	Support
DHCP client  Support  DHCP snooping Support  Ping/tracert detection Support  Optical module DDM Support  Support  Static routing Support 512 static routes  Convergence  Access Control List (ACL) Support ACL 500; Support IP standard ACL; Support MAC extended ACL; Support IP extended ACL  Support QoS re-marking and priority mapping; Support SP, WRR queue scheduling; Supports entrance speed limit and exit speed limit; Support flow-based QoS  Management Command line (CLI) Support Management serial port (Console) Support  WEB management Support Management Support Management Support Support Support Management Support Sup	Rmon	Support
DHCP snooping Support  Ping/tracert detection Support  Dying gasp Support  Optical module DDM Support  Layer 3 Router  Static routing Support 512 static routes  Convergence  Access Control List (ACL) Support ACL 500; Support IP standard ACL; Support MAC extended ACL; Support IP extended ACL  Quality of Service (QOS) Support QoS re-marking and priority mapping; Support SP, WRR queue scheduling; Supports entrance speed limit and exit speed limit; Support flow-based QoS  Management  Command line (CLI) Support  Management serial port (Console) Support  Telnet /SSH Support  WEB management  Support  Management IP Support IPV4/IPV6  SNMP Support SNMPv1/v2c/v3  User Management  Support  System Log Support  File upgrade  Support	NTP client	Support
Ping/tracert detection  Support  Dying gasp  Support  Optical module DDM  Support  Layer 3 Router  Static routing  Support 512 static routes  Convergence  Access Control List (ACL)  Support ACL 500; Support IP standard ACL; Support MAC extended ACL; Support IP extended ACL  Quality of Service (QOS)  Support QOS re-marking and priority mapping; Support SP, WRR queue scheduling; Supports entrance speed limit and exit speed limit; Support flow-based QoS  Management  Command line (CLI)  Management serial port (Console)  Support  VEB management  Support  Management IP  Support IPV4/IPV6  SNMP  Support SMMPv1/v2c/v3  User Management  Support  System Log  Support  Support  Support  Support	DHCP client	Support
Dying gasp Support  Optical module DDM Support  Layer 3 Router  Static routing Support 512 static routes  Convergence  Access Control List (ACL) Support ACL 500; Support IP standard ACL; Support MAC extended ACL; Support IP extended ACL  Quality of Service (QOS) Support QoS re-marking and priority mapping; Support SP, WRR queue scheduling; Support sentrance speed limit and exit speed limit; Support flow-based QoS  Management Command line (CLI) Support Management serial port (Console) Support  Telnet /SSH Support  WEB management Support  Management IP Support IPV4/IPV6  SNMP Support SNMPv1/v2c/v3 User Management Support  Support  Support System Log Support Support	DHCP snooping	Support
Optical module DDM       Support         Layer 3 Router       Support 512 static routes         Convergence       Support ACL 500; Support IP standard ACL; Support MAC extended ACL; Support IP extended ACL         Quality of Service (QOS)       Support QoS re-marking and priority mapping; Support SP, WRR queue scheduling; Supports entrance speed limit and exit speed limit; Support flow-based QoS         Management         Command line (CLI)       Support         Management serial port (Console)       Support         Telnet /SSH       Support         WEB management       Support         Management IP       Support IPV4/IPV6         SNMP       Support SNMPv1/v2c/v3         User Management       Support         System Log       Support         File upgrade       Support	Ping/tracert detection	Support
Layer 3 Router       Static routing     Support 512 static routes       Convergence     Support ACL 500; Support IP standard ACL; Support MAC extended ACL; Support IP extended ACL       Quality of Service (QOS)     Support QoS re-marking and priority mapping; Support SP, WRR queue scheduling; Supports entrance speed limit and exit speed limit; Support flow-based QoS       Management     Command line (CLI)       Management serial port (Console)     Support       Telnet /SSH     Support       WEB management     Support       Management IP     Support IPV4/IPV6       SNMP     Support SNMPv1/v2c/v3       User Management     Support       System Log     Support       File upgrade     Support	Dying gasp	Support
Static routing  Convergence  Access Control List (ACL)  Support ACL 500; Support IP standard ACL; Support MAC extended ACL; Support IP extended ACL  Quality of Service (QOS)  Support QoS re-marking and priority mapping; Support SP, WRR queue scheduling; Supports entrance speed limit and exit speed limit; Support flow-based QoS  Management  Command line (CLI)  Support  Management serial port (Console)  Support  WEB management  Support  Management IP  Support IPV4/IPV6  SNMP  Support SNMPv1/v2c/v3  User Management  Support	Optical module DDM	Support
Convergence  Access Control List (ACL)  Support ACL 500; Support IP standard ACL; Support MAC extended ACL; Support IP extended ACL  Quality of Service (QOS)  Support QoS re-marking and priority mapping; Support SP, WRR queue scheduling; Supports entrance speed limit and exit speed limit; Support flow-based QoS  Management  Command line (CLI)  Support  Management serial port (Console)  Support  Telnet /SSH  Support  WEB management  Support  Management IP  Support IPV4/IPV6  SNMP  Support SNMPV1/v2c/v3  User Management  Support	Layer 3 Router	
Access Control List (ACL)  Support ACL 500; Support IP standard ACL; Support MAC extended ACL; Support IP extended ACL  Support QoS re-marking and priority mapping; Support SP, WRR queue scheduling; Supports entrance speed limit and exit speed limit; Support flow-based QoS  Management  Command line (CLI)  Management serial port (Console)  Support  Telnet /SSH  Support  WEB management  Support  Management IP  Support IPV4/IPV6  SNMP  Support SNMPv1/v2c/v3  User Management  Support	Static routing	Support 512 static routes
Access Control List (ACL)  extended ACL  Support QoS re-marking and priority mapping; Support SP, WRR queue scheduling; Supports entrance speed limit and exit speed limit; Support flow-based QoS  Management  Command line (CLI)  Support  Management serial port (Console)  Telnet /SSH  Support  WEB management  Support  Management IP  Support IPV4/IPV6  SNMP  Support SNMPv1/v2c/v3  User Management  Support  System Log  Support	Convergence	
Management  Command line (CLI)  Management serial port (Console)  Telnet /SSH  WEB management  Support  Management IP  Support   PV4/IPV6  SNMP  Support   S	Access Control List (ACL)	
Command line (CLI)  Management serial port (Console)  Support  Telnet /SSH  Support  WEB management  Support  Management IP  Support IPV4/IPV6  SNMP  Support SNMPv1/v2c/v3  User Management  Support  System Log  Support  Support  Support	Quality of Service (QOS)	
Management serial port (Console)  Telnet /SSH  Support  WEB management  Support  Support IPV4/IPV6  SNMP  Support SNMPv1/v2c/v3  User Management  Support	Management	
Telnet /SSH  Support  Support  Management IP  Support IPV4/IPV6  SNMP  Support SNMPv1/v2c/v3  User Management  System Log  Support  Support  Support  Support  Support  Support  Support	Command line (CLI)	Support
WEB management  Management IP  Support IPV4/IPV6  SNMP  Support SNMPv1/v2c/v3  User Management  Support  System Log  Support  Support  Support  Support  Support	Management serial port (Console)	Support
Management IP  Support IPV4/IPV6  SNMP  Support SNMPv1/v2c/v3  User Management  Support  System Log  Support  Support  Support  Support	Telnet /SSH	Support
SNMP Support SNMPv1/v2c/v3  User Management Support  System Log Support  File upgrade Support	WEB management	Support
User Management Support System Log Support File upgrade Support	Management IP	Support IPV4/IPV6
System Log Support File upgrade Support	SNMP	Support SNMPv1/v2c/v3
File upgrade Support	User Management	Support
	System Log	Support
Firmware upgrade Support	File upgrade	Support
	Firmware upgrade	Support

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Environmental conditions (Environment)	
Operating temperature	$-40^{\circ}$ C $^{\sim}$ +75 $^{\circ}$ C The device is tested for 8 hours at temperatures in 85 $^{\circ}$ C
Storage temperature	-40°C ~ +85°C
Relative humidity	5%~95% non-condensing
Thermal methods	Fanless design, natural cooling
MTBF	100,000 hours
Mechanical Dimensions	
Product size	108*104*143 mm
Installation Method	Rail installation, wall-mounted installation
Weight	1.3 Kg
Protection (EMC & INGRESS PROTECTION)	
IP Level	IP50
Surge protection of Power	IEC 61000-4-5 Level X (6KV/6KV) (8/20us)
Surge protection of Ethernet port	IEC 61000-4-5 Level X (6KV/4KV) (10/700us)
RS	IEC 61000-4-3 Level 3 (10V/m)
EFI	IEC 61000-4-4 Level 3 (1V/2V)
CS	IEC 61000-4-6 Level 3 (10V/m)
PFMF	IEC 61000-4-8 Level4 (30A/m)
DIP	IEC 61000-4-11 Level3 (10V)
ESD	IEC 61000-4-2 Level 4 (8K/15K)
Free fall	0.5m
Authentication	Inspection reports and network access licenses from the Ministry of Public Security and the Ministry of Industry and Information Technology
Certificates	CCC/CE/FCC/RoHS
Accessories	
Accessories	Equipment, terminals, certificate, instructions, Adapter (optional)

## SIZE AND APPEARANCE



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