VELMA

Industrial Ethernet Switches

Realtek	-10℃~55℃	6KV/4KV Surge Protection	RTL POE Control Chipset	100% OEM/ODM
Marvell	IP40 Protection	-40℃~75℃	6KV/4KV Surge Protection	No Blocking Structure	Fanless	50%Metal 50%Aluminum

- Unmanaged / Managed switches
- POE / None-POE
- 10/100/1000 Mbps
- IP40 protection, fanless design
- Test Report: CCC, RoHS, FCC, CE

◢◤ VELMA

5 Port 10/100 Mbps Unmanaged switches

Feature

- Input Voltage: DC 12-58V
- Operating Temperature: -30'C ~ +70'C
- IP40 protection, fanless design
- Test Report: CCC, RoHS, FCC, CE
- Anti-static: 8KV-15KV
- MTBF: 100000 Hour

Description

This device is 5*10/100 Base-T Industrial Ethernet Switches. Through the fanless heat dissipation circuit design, wide range of working environment temperature, high protection level and other technologies, it provides excellent industrial quality with high/low temperature resistance and lightning protection, and enhances the reliability and safety of industrial networks. It can better meet the deployment requirements of rail transit, safe city, intelligent transportation, outdoor monitoring and other harsh environments

MARVELL

3 YEAR WARRANTY

Order no. XPTN-9000-45-5TXm

Provider Mode Ports

Fixed port	5*10/100 Base-T
Power interface	Phoenix terminal, redundant dual power supply
LED Indicators	P1/P2

Cable Type & Transmission Distance

Twisted-pair	0-100m (CAT5e,CAT6)

Network Topology

Star topology	Support
Bus topology	Support
Tree topology	Support

Electrical Specifications

Input voltage	DC 12-58V
Power consumption	Support
Voltage Alarm	Support

Layer 2 Switching

Switching capacity	1 G
Packet forwarding rate	0.744 Mpps
MAC address table	2 K
Buffer	768 K
Forwarding delay	<5 us
MDX/MIDX	Support
Jumbo Frame	Support 2K Bytes
WatchDog	Support
Port Isolation	Support

Environment

Operating temperature	-30'C~+75'C
Storage temperature	-30'C~+75'C
Relative humidity	10 %~90% non-condensing
Thermal methods	Fanless, natural cooling
MTBF	100,000 hours

Mechanical Dimensions

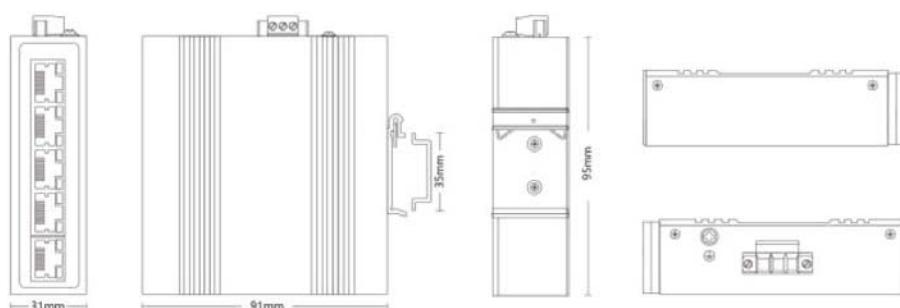|	
Product size	95*91*31 mm
Installation Method	DIN rail
Weight	0.3 KG

EMC & Ingress Protection

IP Level	IP40
Surge of Power	IEC 61000-4-5 Level (6KV/4KV)
Surge of Ethernet port	IEC 61000-4-5 Level (6KV/4KV)
RS	IEC 61000-4-3 Level 3
EFI	IEC 61000-4-4 Level 3
CS	IEC 61000-4-6 Level 3
PFMF	IEC 61000-4-8 Level 3
DIP	IIEC 61000-4-11 Level 3
ESD	IEC 61000-4-2 Level 4
Free fall	0.5m

EMC & Ingress Protection

Authentication	ICCC, CE, FCC, RoHS

VELMA

8 Port 10/100 Mbps Unmanaged switches

Feature

- Input Voltage: DC 12-58V
- Operating Temperature: -30'C ~ +70'C
- IP40 protection, fanless design
- Test Report: CCC, RoHS, FCC, CE
- Anti-static: 8KV-15KV
- MTBF: 100000 Hour

Description

This device is 8*10/100 Base-T Industrial Ethernet Switches. Through the fanless heat dissipation circuit design, wide range of working environment temperature, high protection level and other technologies, it provides excellent industrial quality with high/low temperature resistance and lightning protection, and enhances the reliability and safety of industrial networks. It can better meet the deployment requirements of rail transit, safe city, intelligent transportation, outdoor monitoring and other harsh environments

MARVELL

3 YEAR WARRANTY

Order no.   XPTN-9000-45-8TXm

Provider Mode Ports

Fixed port	8*10/100 Base-T
Power interface	Phoenix terminal, redundant dual power supply
LED Indicators	P1/P2

Cable Type & Transmission Distance

Twisted-pair	0-100m (CAT5e,CAT6)

Network Topology

Star topology	Support
Bus topology	Support
Tree topology	Support

Electrical Specifications

Input voltage	DC 12-58V
Power consumption	Support
Voltage Alarm	Support

Layer 2 Switching

Switching capacity	1.8 G
Packet forwarding rate	1.33 Mpps
MAC address table	2 K
Buffer	512 K
Forwarding delay	<5 us
MDX/MIDX	Support
Jumbo Frame	Support 2048 Bytes
WatchDog	Support
Port Isolation	Support

Environment

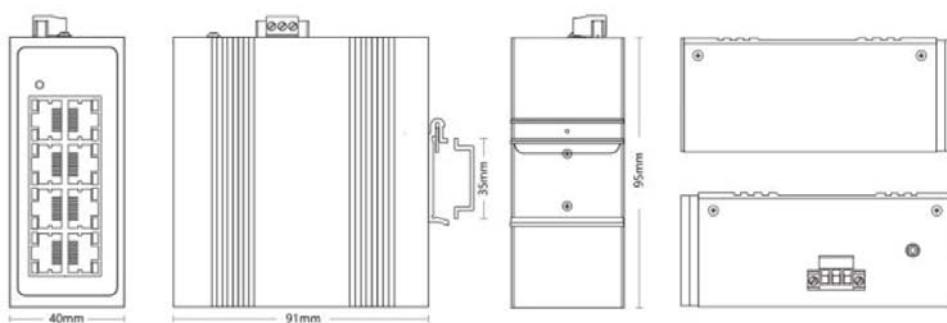|	
Operating temperature	-30'C~+75'C
Storage temperature	-30'C~+75'C
Relative humidity	10 %~90% non-condensing
Thermal methods	Fanless, natural cooling
MTBF	100,000 hours

Mechanical Dimensions

Product size	95*91*31 mm
Installation Method	DIN rail
Weight	0.37 KG

EMC & Ingress Protection

IP Level	IP40
Surge of Power	IEC 61000-4-5 Level (6KV/4KV)
Surge of Ethernet port	IEC 61000-4-5 Level (6KV/4KV)
RS	IEC 61000-4-3 Level 3
EFI	IEC 61000-4-4 Level 3
CS	IEC 61000-4-6 Level 3
PFMF	IEC 61000-4-8 Level 3
DIP	IIEC 61000-4-11 Level 3
ESD	IEC 61000-4-2 Level 4
Free fall	0.5m

EMC & Ingress Protection

Authentication	ICCC, CE, FCC, RoHS

VELMA

16 Port 10/100 Mbps Unmanaged switches

Feature

- Input Voltage: DC 12-58V
- Operating Temperature: -30'C ~ +70'C
- IP40 protection, fanless design
- Test Report: CCC, RoHS, FCC, CE
- Anti-static: 8KV-15KV
- MTBF: 100000 Hour

Description

This device is 1*/10w100 Base-T Industrial Ethernet S. itcheskThrough the fanless heat dissipation circuit design, . ide range of . orxing environment temperature, high protection level and other technologies, it provides eqcellent industrial yualitb . ith highwo. temperature resistance and lightning protection, and enhances the reliaLilitb and safetb of industrial net. orxskIt can Letter meet the deplobment reyuirements of rail transit, safe citb, intelligent transportation, outdoor monitoring and other harsh environments

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3 YEAR WARRANTY

Order no. XPTN-9000-45-16XT

Provider Mode Ports

Fiqed port	1*/10w100 Base-T
Po. er interface	Phoeniq terminal, redundant dual po. er supplb
(ED Indicators	P1wP2

Cable Type & Transmission Distance

T. isted-pair	0-100m 6CAT5e,CAT*)

Network Topology

Star topologb	Support
Bus topologb	Support
Tree topologb	Support

Electrical Specifications

Input voltage	DC 12-58V
Po. er consumption	Support
Voltage Alarm	Support

Layer 2 Switching

S. itching capacitb	32 G
Pacxet for. arding rate	2k38 Mpps
MAC address taLle	8 K
Buffer	2M
For. arding delab	<10 us
MDXwMIDX	Support
JumLo Frame	Support 10K Bbtes
WatchDog	Support
Port Isolation	Support

Environment

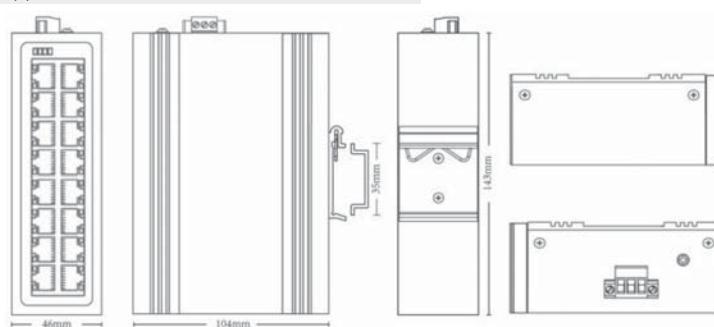|	
Operating temperature	-30'C~+75'C
Storage temperature	-30'C~+75'C
Relative humiditb	10 %~90% non-condensing
Thermal methods	Fanless, natural cooling
MTBF	100,000 hours

Mechanical Dimensions

Product size	143X104X4* mm
Installation Method	DIN rail
Weight	0k5 KG

EMC & Ingress Protection

IP (evel	IP40
Surge of Po. er	IEC *1000-4-5 (evel 6'KVw4KV)
Surge of Ethernet port	IEC *1000-4-5 (evel 6'KVw4KV)
RS	IEC *1000-4-3 (evel 3
EFI	IEC *1000-4-4 (evel 3
CS	IEC *1000-4-* (evel 3
PFMF	IEC *1000-4-8 (evel 3
DIP	IIEC *1000-4-11 (evel 3
ESD	IEC *1000-4-2 (evel 4
Free fall	0k5m

EMC & Ingress Protection

Authentication	ICCC, CE, FCC, RoHS

VELMA

5 Port 100/1000 Mbps Unmanaged switches
Gigabit RJ45 Port

Feature

- Input Voltage: DC 12-58V
- Operating Temperature: -30'C ~ +70'C
- IP40 protection, fanless design
- Test Report: CCC, RoHS, FCC, CE
- Anti-static: 8KV-15KV
- MTBF: 100000 Hour

Description

This device is 5*100/1000 Base-T Industrial Ethernet Switches. Through the fanless heat dissipation circuit design, wide range of working environment temperature, high protection level and other technologies, it provides excellent industrial quality with high/low temperature resistance and lightning protection, and enhances the reliability and safety of industrial networks. It can better meet the deployment requirements of rail transit, safe city, intelligent transportation, outdoor monitoring and other harsh environments

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3 YEAR WARRANTY

Order no.   XPTN-9000-45-5GX

Provider Mode Ports

Fixed port	5*100/1000 Base-T L igabit R(45 Port
Power interface	Phoenix terminal, redundant dual power supply
6ED Indicators	P1/P2

Cable Type & Transmission Distance

Twisted-pair	0-100m)CAT5e,CATG<

Network Topology

Star topology	Support
Bus topology	Support
Tree topology	Support

Electrical Specifications

Input voltage	DC 12-58V
Power consumption	Support
Voltage Alarm	Support

Layer 2 Switching

Switching capacity	14 L
Packet forwarding rate	10.41GMpps
MAC address table	8 K
Buffer	1 M
Forwarding delay	X5 us
MDJ/MIDJ	Support
(umbo Frame	Support 10K Bytes
WatchDog	Support
Port Isolation	Support

Environment

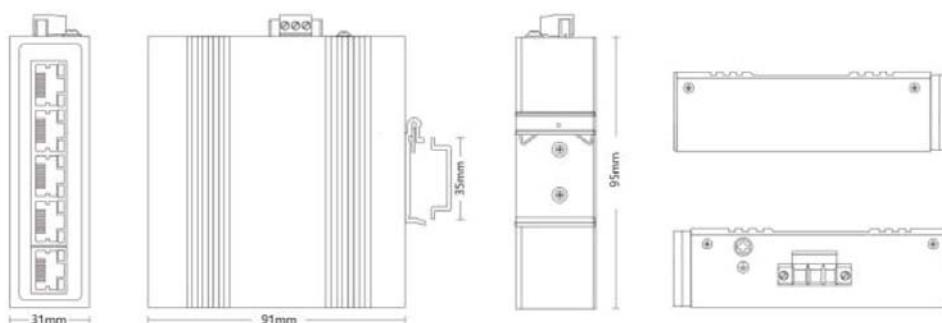|	
Operating temperature	-30'C~+75'C
Storage temperature	-30'C~+75'C
Relative humidity	10 %~90% non-condensing
Thermal methods	Fanless, natural cooling
MTBF	100,000 hours

Mechanical Dimensions

Product size	31*91*118mm
Installation Method	DIN rail
Weight	0.4 KL

EMC & Ingress Protection

IP 6evel	IP40
Surge of Power	IEC G1000-4-5 6evel)GKV/4KV<
Surge of Ethernet port	IEC G1000-4-5 6evel)GKV/4KV<
RS	IEC G1000-4-3 6evel 3
EFI	IEC G1000-4-4 6evel 3
CS	IEC G1000-4-G6evel 3
PFMF	IEC G1000-4-8 6evel 3
DIP	IIEC G1000-4-11 6evel 3
ESD	IEC G1000-4-2 6evel 4
Free fall	0.5m

EMC & Ingress Protection

Authentication	ICCC, CE, FCC, RoHS

☑ VELMA

8 Port 100/1000 Mbps Unmanaged switches
Gigabit RJ45 Port

Feature

- ■ Input Voltage: DC 12-58V
- ■ Operating Temperature: -30'C ~ +70'C
- ■ IP40 protection, fanless design
- ■ Test Report: CCC, RoHS, FCC, CE
- ■ Anti-static: 8KV-15KV
- ■ MTBF: 100000 Hour

Description

This device is 8*100/1000 Base-T Industrial Ethernet Switches. Through the fanless heat dissipation circuit design, wide range of working environment temperature, high protection level and other technologies, it provides excellent industrial quality with high/low temperature resistance and lightning protection, and enhances the reliability and safety of industrial networks. It can better meet the deployment requirements of rail transit, safe city, intelligent transportation, outdoor monitoring and other harsh environments

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3 YEAR WARRANTY

Order no.   XPTN-9000-45-8GX

Provider Mode Ports

Fixed port	8*100/1000 Base-T L igabit R(45 Port
Power interface	Phoenix terminal, redundant dual power supply
6ED Indicators	P1/P2

Cable Type & Transmission Distance

Twisted-pair	0-100m)CAT5e,CATG<

Network Topology

Star topology	Support
Bus topology	Support
Tree topology	Support

Electrical Specifications

Input voltage	DC 12-58V
Power consumption	Support
Voltage Alarm	Support

Layer 2 Switching

Switching capacity	20 L
Packet forwarding rate	14.88 Mpps
MAC address table	1GK
Buffer	2M
Forwarding delay	X5 us
MDJ /MIDJ	Support
(umbo Frame	Support 10K Bytes
WatchDog	Support
Port Isolation	Support

Environment

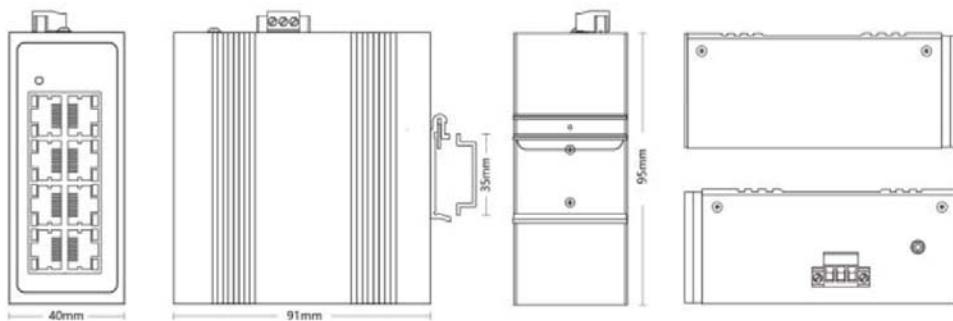|	
Operating temperature	-30'C~+75'C
Storage temperature	-30'C~+75'C
Relative humidity	10 %~90% non-condensing
Thermal methods	Fanless, natural cooling
MTBF	100,000 hours

Mechanical Dimensions

Product size	4GJ 104J 143mm
Installation Method	DIN rail
Weight	0.5 KL

EMC & Ingress Protection

IP 6evel	IP40
Surge of Power	IEC G1000-4-5 6evel)GKV/4KV<
Surge of Ethernet port	IEC G1000-4-5 6evel)GKV/4KV<
RS	IEC G1000-4-3 6evel 3
EFI	IEC G1000-4-4 6evel 3
CS	IEC G1000-4-G6evel 3
PFMF	IEC G1000-4-8 6evel 3
DIP	IIEC G1000-4-11 6evel 3
ESD	IEC G1000-4-2 6evel 4
Free fall	0.5m

EMC & Ingress Protection

Authentication	ICCC, CE, FCC, RoHS

35mm

95mm

40mm

91mm

✖ VELMA

16 Port 100/1000 Mbps Unmanaged switches
Gigabit RJ45 Port

Feature

Input Voltage: DC 12-58V
- Operating Temperature: -30'C ~ +70'C
- IP40 protection, fanless design
- Test Report: CCC, RoHS, FCC, CE
- Anti-static: 8KV-15KV
- MTBF: 100000 Hour

Description

This device is 1*/100w1000 Base-T Industrial Ethernet S. itcheskThrough the fanless heat dissipation circuit design, . ide range of . orxing environment temperature, high protection level and other technologies, it provides eqcellent industrial yualitb . ith highwo. temperature resistance and lightning protection, and enhances the reliaLilitb and safetb of industrial net. orxskIt can Letter meet the deplobment reyuirements of rail transit, safe citb, intelligent transportation, outdoor monitoring and other harsh environments

MARVELL
3 YEAR WARRANTY

Order no. XPTN-9000-45-16GX

Provider Mode Ports

Fiqed port	1*/100w1000 Base-T (igaLit R645 Port
Po. er interface	Phoeniq terminal, redundant dual po. er supplb
) ED Indicators	P1wP2

Cable Type & Transmission Distance

T. isted-pair	0-100m GCAT5e,CAT*<

Network Topology

Star topologb	Support
Bus topologb	Support
Tree topologb	Support

Electrical Specifications

Input voltage	DC 12-58V
Po. er consumption	Support
Voltage Alarm	Support

Layer 2 Switching

S. itching capacitb	32 (
Pacxet for. arding rate	23k8 Mpps
MAC address taLle	8 K
Buffer	2M
For. arding delab	X5 us
MDJwMIDJ	Support
6umLo Frame	Support 10K Bbtes
WatchDog	Support
Port Isolation	Support

Environment

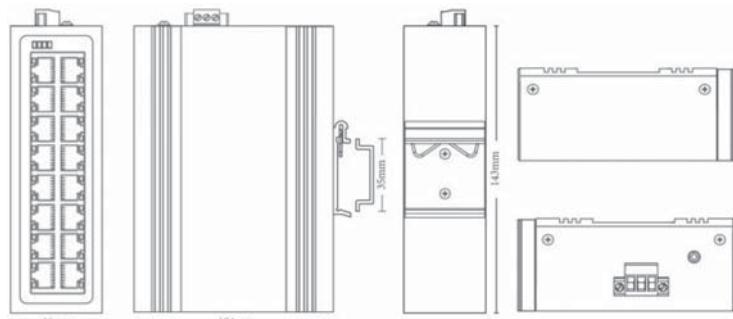|	
Operating temperature	-30'C~+75'C
Storage temperature	-30'C~+75'C
Relative humiditb	10 %~90% non-condensing
Thermal methods	Fanless, natural cooling
MTBF	100,000 hours

Mechanical Dimensions

Product size	143J104J4* mm
Installation Method	DIN rail
Weight	0k5 K(

EMC & Ingress Protection

IP) evel	IP40
Surge of Po. er	IEC * 1000-4-5) evel GKVw4KV<
Surge of Ethernet port	IEC * 1000-4-5) evel GKVw4KV<
RS	IEC * 1000-4-3) evel 3
EFI	IEC * 1000-4-4) evel 3
CS	IEC * 1000-4-*) evel 3
PFMF	IEC * 1000-4-8) evel 3
DIP	IIEC * 1000-4-11) evel 3
ESD	IEC * 1000-4-2) evel 4
Free fall	0k5m

EMC & Ingress Protection

Authentication	ICCC, CE, FCC, RoHS

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