

อุปกรณ์กระจายสัญญาณเครือข่าย เกรดอุตสาหกรรม

Industrial Ethernet

Powering Next Generation
Automation Network Solutions



VOLKTEK

บริษัท อีเอ็นที กรุ๊ป จำกัด
ตัวแทนจำหน่ายอย่างเป็นทางการในประเทศไทย



PRODUCT FEATURES & BENEFITS



Robust Switch Performance

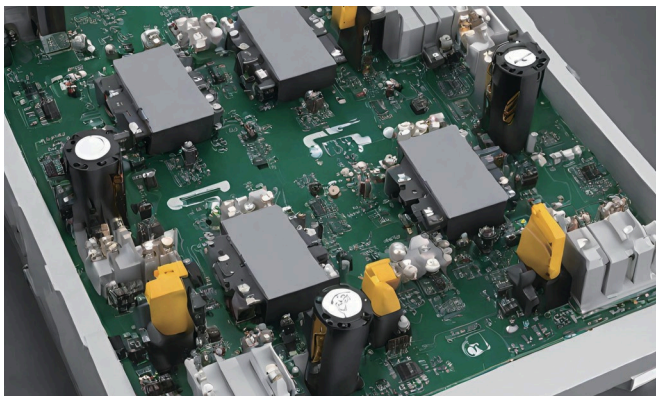
■ Volktek industrial switches are built with field-hardened components and enclosed in rugged IP30 grade case to withstand harsh industrial environments such as constant vibration, heavy shocks, humidity and extreme temperatures ranging from -40 °C to 75 °C.

■ Volktek industrial switches are built with industrial grade components to ensure continuous operation of mission-critical applications even in tough and harsh industrial environments.

Industrial Grade EMC Protection

■ Discover the resilience of Volktek industrial switches, fortified with top-tier safeguards such as surge protection and ESD defense against voltage surges.

■ Our industrial switches are engineered to meet stringent industry standards such as EN61000-6-2 and EN61000-6-4. They boast ESD protection and dual power inputs, ensuring unparalleled reliability for your system.



Efficient Power Isolation

Volktek switches incorporate Power Isolation features, which create a protective barrier between the primary circuit and other circuits, guaranteeing device safety. This functionality shields the internal circuitry from potential harm caused by surges, ESD, or power fluctuations.

Factory Automation

Customer's Requirements

PLCs and RTUs are microcomputers that communicate with an array of objects such as factory machines, sensors, and end devices, and then route the information from those objects to computers with SCADA software. Volktek industrial network switches allow them to communicate between those devices. Then SCADA software processes, distributes, and displays the data, helping operators and

Proposed Solutions

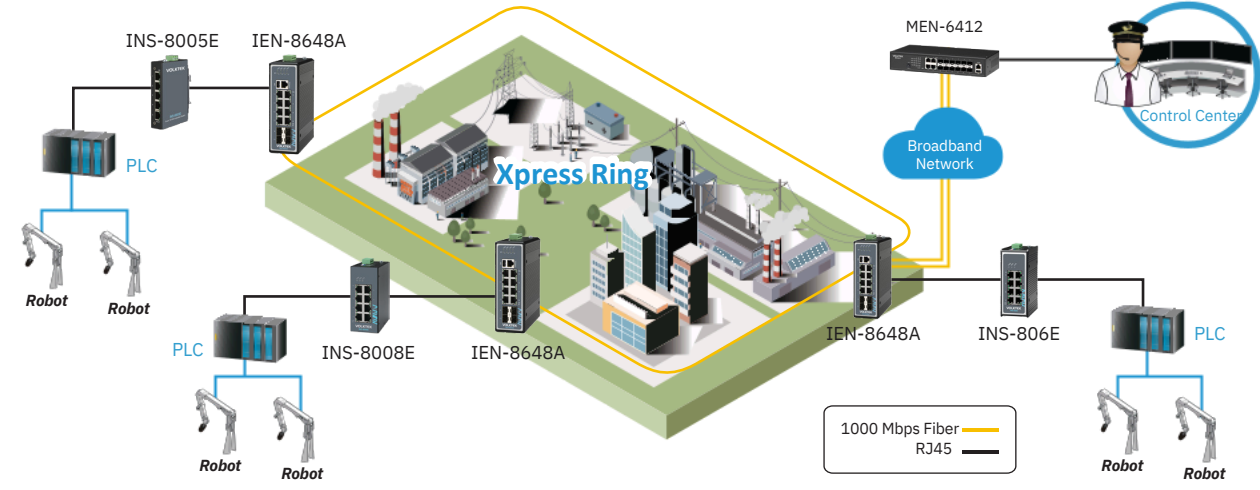
- Volktek switches are designed with various ring protocols like Xpress Ring and ERPS where the network failure is recovered in time scale of milliseconds. This ensures non-stop transmission of real-time video and data.




other employees analyze the data and make important decisions and to help mitigate downtime. These kind systems require redundant link for all time connectivity and must operate in wide temperature so that no data is lost. And communication should be established between different plants in the same industry.

- Volktek's industrial switches tend to operate at critical temperature.
- Industrial grade switches provide better protection against ESD, and also certified with EMI/EMC protection.


- Every switch is rugged to excel in mission-critical applications for production and process automation and can be integrated into any large-scale distributed SCADA monitoring system.
- Features like SNMP, Hardware monitor notifies administrator during any unwanted hardware failure or accidental power cut to ensure the reliability.



Products Applied



IEN-8648A
L2+ Managed
8 x 10/100/1000 RJ45 &
4 x GbE SFP
Industrial Switch



INS-8008E
Unmanaged
8 x 10/100 RJ45
Industrial Switch



INS-8005E
Unmanaged
5 x 10/100 RJ45
Industrial Switch

PRODUCT INTRODUCTION

Managed Switches



IEN-8648A
L2+ Managed
8 x 10/100/1000 RJ45 &
4 x GbE SFP
Industrial Switch
USB Support



IEN-8608A
L2+ Managed
8 x 10/100/1000 RJ45
Industrial Switch
USB Support



INS-8624
Managed
4 x 10/100/1000 RJ45 &
2 x FX/GbE SFP
Industrial Switch



INS-8615
Managed
5 x 10/100/1000 RJ45 &
1 x FX/GbE SFP
Industrial Switch



INS-8528
Managed
8 x 10/100 RJ45 &
2 x FX/GbE SFP
Industrial Switch



Woodpecker 9015-8GT
Managed
8 x 10/100/1000 RJ45
Industrial Switch



Woodpecker 9015-8GT2GS
Managed
8 x 10/100/1000 RJ45 &
2 x FX/GbE SFP
Industrial Switch



Woodpecker 9015-16GT-I
Managed
16 x 10/100/1000 RJ45
Industrial Switch

PRODUCT APPLICATION



Intelligent Transportation System

Key Features

- Long distance transmissions with high bandwidths.
- High reliability for outdoor applications.
- Optical bandwidth utilization for video transmission.
- Link and power redundancy.

www.volktek.com



Unmanaged Switches Premium



INS-801E
Unmanaged 5 x
10/100 RJ45
Industrial
Switch



INS-8005E
Unmanaged 5 x
10/100 RJ45
Industrial
Switch



INS-8405E
Unmanaged 5 x
10/100/1000 RJ45
Industrial Switch



INS-8415
Unmanaged
5 x 10/100/1000 RJ45 &
1 x GbE SFP
Industrial Switch



INS-8008E
Unmanaged 8 x
10/100 RJ45
Industrial Switch



INS-8108E
Unmanaged 8 x
10/100 RJ45
Industrial
Switch



INS-8408E
Unmanaged
8 x 10/100/1000 RJ45
Industrial Switch



INS-802E
Unmanaged
8 x 10/100 RJ45 &
2 x FX/GbE SFP
Industrial Switch



Woodpecker 7015-8GT2GS-I
Unmanaged
8 x 10/100/1000 RJ45 &
2 x GbE SFP
Industrial Switch

Standard



IEN-8005A
Unmanaged 5 x
10/100 RJ45
Industrial
Switch



INS-8405A
Unmanaged
5 x 10/100/1000 RJ45
Industrial Switch



INS-8008A
Unmanaged 8 x
10/100 RJ45
Industrial Switch



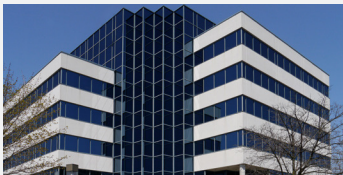
INS-8408A
Unmanaged
8 x 10/100/1000 RJ45
Industrial Switch



INS-840G
Unmanaged
16 x 10/100/1000 RJ45
Industrial Switch



Woodpecker 7013-16GT
Unmanaged
16 x 10/100/1000 RJ45
Industrial Switch



Building Automation

Key Features

- High bandwidth and transmission rate.
- Link and power redundancy.
- Compact size for building interlayer placement.
- Reliability for fire protection system networks.



Factory Automation

Key Features

- High Mean Time Between Failures (MTBF) with 5 years of warranty for repair or replacement.
- High data transmission rate.
- Anti-shock and anti-vibration design.

PRODUCT INTRODUCTION

Substation Certified Switches



IEN-9425-SS
Unmanaged
5 x 10/100/1000 RJ45 &
2 x GbE SFP
SUBSTATION APPROVAL



IEN-9428-SS
Unmanaged
8 x 10/100/1000 RJ45 &
2 x FX/GbE SFP
SUBSTATION APPROVAL



IEN-9648-SS
Managed 8 x 10/100/1000
RJ45 & 4 x GbE SFP USB
Support SUBSTATION
APPROVAL

Railway Certified Switches



IEN-9425-RW
Unmanaged
5 x 10/100/1000 RJ45 &
2 x GbE SFP
RAILWAY APPROVAL



IEN-9648-RW
Managed 8 x
10/100/1000 RJ45 & 4
x GbE SFP USB Support
RAILWAY APPROVAL



IEN-9428-RW
Unmanaged
8 x 10/100/1000 RJ45 &
2 x GbE SFP
RAILWAY APPROVAL

DNV Certified Switches



INS-8528M
Managed
8 x 10/100 RJ45 &
2 x FX/GbE SFP
DNV APPROVAL



IEN-9648M
L2+ Managed 8 x
10/100/1000 RJ45 & 4
x GbE SFP USB Support
DNV APPROVAL



INS-840GM
Unmanaged
16 x 10/100/1000 RJ45
DNV APPROVAL



INS-8005M
Unmanaged
5 x 10/100 RJ45
DNV APPROVAL



INS-8405M
Unmanaged
5 x 10/100/1000 RJ45
DNV APPROVAL

PRODUCT APPLICATION



Substation

Key Features

- Fast communication through Priority Packets.
- Efficient and reliable communication with VLAN.
- Fiber health diagnostic with DDM.
- Smart recovery through Code Redundancy.

Profinet Certified Switches



IEN-8508-PN
Managed
8 x 10/100 RJ45
PROFINET Compliance



IEN-8528-PN
Managed
8 x 10/100 RJ45 &
2 x FX/GbE SFP
PROFINET Compliance



IEN-8648-PN
Managed
8 x 10/100/1000 RJ45 &
4 x GbE SFP
PROFINET Approval

EtherNet/IP Certified Switches



IEN-8648A-EIP
Managed 8 x
10/100/1000 RJ45 & 4 x
GbE SFP USB Support
EtherNet/IP APPROVAL



Railway

Key Features

- Vibration proof.
- Surge and ESD protection.
- Robust and durable.
- Long haul network.
- Operational efficiency.



Maritime and Offshore Applications

Key Features

- High level ESD & surge protection.
- Enclosed in aluminum casing for antirust protection.
- Wide operating temperature for reliability in harsh environments.
- Vibration and shock proof.

PRODUCT INTRODUCTION

UL Certified Switches



IEN-8005A
Unmanaged 5 x
10/100 RJ45
Industrial
Switch



INS-8008A
Unmanaged 8 x
10/100 RJ45
Industrial Switch



INS-8005E
Unmanaged 5 x
10/100 RJ45
Industrial
Switch



INS-8108E
Unmanaged 8 x
10/100 RJ45
Industrial
Switch



INS-8405E
Unmanaged 5 x
10/100/1000 RJ45
Industrial Switch



INS-8408E
Unmanaged
8 x 10/100/1000 RJ45
Industrial Switch



INS-801E
Unmanaged 5 x
10/100 RJ45
Industrial
Switch



INS-802E
Unmanaged
8 x 10/100 RJ45 &
2 x FX/GbE SFP
Industrial Switch



INS-840G
Unmanaged
16 x 10/100/1000 RJ45
Industrial Switch



Woodpecker 7013-16GT
Unmanaged
16 x 10/100/1000 RJ45
Industrial Switch



IEN-9648-SS
Managed 8 x 10/100/1000
RJ45 & 4 x GbE SFP USB
Support SUBSTATION
APPROVAL



INS-8528M
Managed
8 x 10/100 RJ45 &
2 x FX/GbE SFP
DNP APPROVAL



IEN-8508-PN
Managed
8 x 10/100 RJ45
PROFINET Compliance



IEN-8528-PN
Managed
8 x 10/100 RJ45 &
2 x FX/GbE SFP
PROFINET Compliance



IEN-8648-PN
Managed
8 x 10/100/1000 RJ45 &
4 x GbE SFP
PROFINET Approval

Mmanaged Industrial Switches



Model		INS-8624	INS-8615	IEN-8608A	Woodpecker 9015-8GT	Woodpecker 9015-8GT2GS	INS-8528	IEN-8648A	Woodpecker 9015-16GT-I	
Interface	RJ45	4 x 10/100/1000	5 x 10/100/1000	8 x 10/100/1000	8 x 10/100/1000	8 x 10/100/1000	8 x 10/100	8 x 10/100/1000	16 x 10/100/1000	
	SFP	2 x FX/GbE	1 x FX/GbE	-	-	2 x FX/GbE	2 x FX/GbE	4 x GbE	-	
	Console	-	-	1	-	-	1	1	-	
	USB	-	-	Y	-	-	-	Y	-	
Hardware	Jumbo Frame (Bytes)	10K	10K	10K	10K	10K	10K	10K	10K	
	MAC Entries	8K	8K	16K	8K	8K	16K	16K	8K	
	Fan-less	Y	Y	-	Y	Y	Y	Y	Y	
	SFP Information	Y	Y	-	Y	Y	Y	Y	Y	
	SFP DDMI	12Gbps	12Gbps	16Gbps	Y	20Gbps	5.6Gbps	24Gbps	32Gbps	
	Switching Fabric	Y	Y	Y	16Gbps	Y	Y	Y	Y	
Management	CLI	Y	Y	Y	Y	Y	Y	Y	Y	
	Telnet / SSH	HTTP	HTTP	Y	Y	Y	Y	Y	Y	
	HTTP/HTTPS	Y	Y	Y	Y	Y	Y	Y	Y	
	SNMP	Y	Y	Y	Y	Y	Y	Y	Y	
	SNMP Trap	Y	Y	Y	Y	Y	Y	Y	Y	
	MVLAN	Y	Y	Y	Y	Y	Y	Y	Y	
	Firmware Upgradable	-	-	-	Y	-	-	-	-	
	Configuration Backup/Restore	Y	Y	Y	Y	Y	Y	Y	Y	
	Syslog	Y	Y	Y	Y	Y	Y	Y	Y	
	SNTP	Y	Y	Y	Y	Y	Y	Y	Y	
	LLDP	Y	Y	Y	Y	Y	Y	Y	Y	
	UDLD	-	-	Y	-	-	-	Y	-	
	DHCP Client	Y	Y	Y	Y	Y	Y	Y	Y	
	DHCP Option 82	Y	Y	Y	Y	Y	Y	Y	Y	
e-mail Alarm	Y	Y	Y	Y	Y	Y	Y	Y		
Service Control	Y	Y	Y	Y	Y	Y	Y	Y		
Reliability	STP / RSTP / MSTP	STP / RSTP	STP / RSTP	Y	STP / RSTP	STP / RSTP	Y	Y	STP / RSTP	
	Xpress Ring	-	-	Y	-	-	Y	Y	-	
	ERPS v1/v2	Y	Y	Y	Y	Y	Y	Y	Y	
	Dual Homing	Y	Y	Y	Y	Y	Y	Y	Y	
	LACP	-	-	Y	Y	Y	Y	Y	Y	
Code Redundancy	Y	Y	Y	Y	Y	Y	Y	Y		
VLAN	IEEE 802.1Q VLAN	-	-	Y	-	-	Y	Y	-	
	GARP/GVRP	Y	Y	Y	Y	Y	Y	Y	Y	
	Port-based VLAN	Y	Y	Y	Y	Y	Y	Y	Y	
	MAC-based VLAN	-	-	Y	-	-	Y	Y	-	
	IP-based VLAN	-	-	Y	-	-	Y	Y	-	
	Protocol-based QinQ	Y	Y	Y	Y	Y	Y	Y	Y	
	VLAN Translation	Y	Y	Y	Y	Y	Y	Y	Y	
Security	ACL	Y	Y	Y	Y	Y	Y	Y	Y	
	SSH	Y	Y	Y	Y	Y	Y	Y	Y	
	Port Security	Y	Y	Y	Y	Y	Y	Y	Y	
	Port-based 802.1X	-	-	Y	-	-	Y	Y	-	
	TACACS+	Y	Y	Y	Y	Y	Y	Y	Y	
	MAC Search	-	-	Y	-	-	Y	Y	-	
	Refusal MAC	Y	Y	Y	Y	Y	Y	Y	Y	
	Static MAC	Y	Y	Y	Y	Y	Y	Y	Y	
	DHCP Snooping	Y	Y	Y	Y	Y	Y	Y	Y	
	DHCP Sever Screening	Y	Y	Y	Y	Y	Y	Y	Y	
	ARP Inspection	Y	Y	Y	Y	Y	Y	Y	Y	
	BPDU Guard/Filter	Y	Y	Y	Y	Y	Y	Y	Y	
	Root Guard	20 ~ 57VDC	12 ~ 57VDC	12 ~ 60VDC	24~48V DC	24~48V DC	12 ~ 60VDC	12 ~ 60VDC	12~60V DC	
Management Host	Y	Y	Y	Y	Y	Y	Y	Y		
Power	DC Power Input	10W	10W	15W	-	11W	12W	18W	18W	
	Redundant Power	-	-	-	-	-	-	-	-	
Installation & operation information	Max Power Consumption	10W								
	Dimensions (W x H x D) mm	50 x 160 x 120	31 x 136 x 105	50 x 160 x 120	50 x 116 x 100mm	50 x 116 x 100mm	50 x 160 x 120	50 x 160 x 120	50 x 160 x 120	
	Weight	740g	515g	935g	550g	550g	780g	955g	840g	
	Mouting Kit	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail	
Operating Temperature	Operating Temperature	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)	

Managed Certified Switches



Model		IEN-8508-PN	IEN-8528-PN	INS-8528M	IEN-8648-PN	IEN-9648-RW	IEN-9648-SS	IEN-9648M	IEN-8648A-EIP
Interface	RJ45	8 x 10/100	8 x 10/100	8 x 10/100	8 x 10/100/1000	8 x 10/100/1000	8 x 10/100/1000	8 x 10/100/1000	8 x 10/100/1000
	SFP	-	2 x GbE	2 x FX/Gb	4 x GbE	4 x GbE	4 x GbE	4 x GbE	4 x GbE
	Console	1	1	1	1	1	1	1	1
	USB	-	-	-	-	Y	Y	-	10K
Hardware	Jumbo Frame (Bytes)	10K	10K	10K	10K	10K	10K	10K	16K
	MAC Entries	16K	16K	16K	16K	16K	16K	16K	Y
	Fan-less	Y	Y	Y	Y	Y	Y	Y	Y
	SFP Information	-	Y	Y	Y	Y	Y	Y	Y
	SFP DDMI	-	Y	Y	Y	Y	Y	Y	24Gbps
	Switching Fabric	1.6Gbps	5.6Gbps	5.6Gbps	24Gbps	24Gbps	24Gbps	24Gbps	Y
	CLI	Y	Y	Y	Y	Y	Y	Y	Y
Management	Telnet / SSH	Y	Y	Y	Y	Y	Y	Y	Y
	HTTP/HTTPS	Y	Y	Y	Y	Y	Y	Y	Y
	SNMP	Y	Y	Y	Y	Y	Y	Y	Y
	SNMP Trap	Y	Y	Y	Y	Y	Y	Y	Y
	MVLAN	Y	Y	Y	Y	Y	Y	Y	Y
	Firmware Upgradable	Y	Y	Y	Y	Y	Y	Y	Y
	Configuration Backup/Restore	Y	Y	Y	Y	Y	Y	Y	Y
	Syslog	Y	Y	Y	Y	Y	Y	Y	Y
	SNTP	Y	Y	Y	Y	Y	Y	Y	Y
	LLDP	Y	Y	Y	Y	Y	Y	Y	Y
	UDLD	-	-	-	Y	Y	Y	-	Y
	DHCP Client	Y	Y	Y	Y	Y	Y	Y	Y
	DHCP Option 82	Y	Y	Y	Y	Y	Y	Y	Y
	e-mail Alarm	Y	Y	Y	Y	Y	Y	Y	Y
Service Control	Y	Y	Y	Y	Y	Y	Y	Y	
Reliability	STP / RSTP / MSTP	Y	Y	Y	Y	Y	Y	Y	Y
	Xpress Ring	Y	Y	Y	Y	Y	Y	Y	Y
	ERPS v1/v2	Y	Y	Y	Y	Y	Y	Y	Y
	Dual Homing	Y	Y	Y	Y	Y	Y	Y	Y
	LACP	Y	Y	Y	Y	Y	Y	Y	Y
Code Redundancy	Y	Y	Y	Y	Y	Y	Y	Y	
VLAN	IEEE 802.1Q VLAN	Y	Y	Y	Y	Y	Y	Y	Y
	GARP/GVRP	Y	Y	Y	Y	Y	Y	Y	Y
	Port-based VLAN	Y	Y	Y	Y	Y	Y	Y	Y
	MAC-based VLAN	Y	Y	Y	Y	Y	Y	Y	Y
	IP-based VLAN	Y	Y	Y	Y	Y	Y	Y	Y
	Protocol-based	Y	Y	Y	Y	Y	Y	Y	Y
	QinQ	Y	Y	Y	Y	Y	Y	Y	Y
	VLAN Translation	Y	Y	Y	Y	Y	Y	Y	Y
Security	ACL	Y	Y	Y	Y	Y	Y	Y	Y
	SSH	Y	Y	Y	Y	Y	Y	Y	Y
	Port Security	Y	Y	Y	Y	Y	Y	Y	Y
	Port-based 802.1X	Y	Y	Y	Y	Y	Y	Y	Y
	TACACS+	Y	Y	Y	Y	Y	Y	Y	Y
	MAC Search	Y	Y	Y	Y	Y	Y	Y	Y
	Refusal MAC	Y	Y	Y	Y	Y	Y	Y	Y
	Static MAC	Y	Y	Y	Y	Y	Y	Y	Y
	DHCP Snooping	Y	Y	Y	Y	Y	Y	Y	Y
	DHCP Server Screening	Y	Y	Y	Y	Y	Y	Y	Y
	ARP Inspection	Y	Y	Y	Y	Y	Y	Y	Y
Power	BPD Guard/Filter	Y	Y	Y	Y	Y	Y	Y	Y
	Root Guard	Y	Y	Y	Y	Y	Y	Y	Y
	Management Host	12 ~ 60VDC	12 ~ 60VDC	12 ~ 60VDC	12 ~ 60VDC	12 ~ 60VDC	12 ~ 60VDC	12 ~ 60VDC	12 ~ 60VDC
	DC Power Input	Y	Y	Y	Y	Y	Y	Y	Y
Installation & operation information	Redundant Power								18W
	Max Power Consumption	12W	12W	12W	18W	18W	18W	18W	
	Dimensions (W x H x D)	50 x 160 x 120 mm 50 x 160 x 120 mm 50 x 160 x 120 mm 50 x 160 x 120 mm 50 x 160 x 120 mm 50 x 160 x 120 mm 50 x 160 x 120 mm 50 x 160 x 120 mm							
Certification	Weight	780g	780g	780g	860g	955g	955g	860g	955g
	Mouting Kit	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail
	Operating Temperature	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)
Approval	PROFINET	PROFINET	DNV	PROFINET	EN 50155 EN 50121-4	IEEE 1613 IEC 61850-3	DNV		



Unmanaged Industrial Switches



Model		INS-801E	INS-8005A	INS-8005E	INS-8405A	INS-8405E	INS-8415	INS-8008A	INS-8008E
Interface	RJ45	5 x 10/100	5 x 10/100	5 x 10/100	5 x 10/100/1000	5 x 10/100/1000	5 x 10/100/1000	8 x 10/100	8 x 10/100
	SFP	-	-	-	-	-	1 x GbE	-	-
Hardware	Jumbo Frame (Bytes)	9216	1552	9216	9K	9K	10K	1552	9216
	MAC Entries	2K	1K	2K	2K	2K	8K	1K	4K
	Fan-less	Y	Y	Y	Y	Y	Y	Y	Y
	Automatic MDI/MDI-X on RJ-45	Y	Y	Y	Y	Y	Y	Y	Y
	Switching Fabric	1Gbps	1Gbps	1Gbps	10Gbps	10Gbps	12Gbps	1.6Gbps	1.6Gbps
Power	DC Power Input	12 ~ 48VDC	12 ~ 48VDC	12 ~ 48VDC	12 ~ 48VDC	12 ~ 48VDC	20 ~ 57VDC	12 ~ 48VDC	12 ~ 48VDC
	Redundant Power	Y	Y	Y	Y	Y	Y	Y	Y
	Max Power Consumption	2.05W	3W	3W	3W	3W	10W	3W	5W
Installation & operation information	Dimensions (W x H x D)	50 x 120 x 100mm	24 x 110 x 74 mm	24 x 110 x 74 mm	24 x 110 x 74 mm	24 x 110 x 74 mm	31 x 136 x 105 mm	50 x 116 x 100 mm	50 x 116 x 100 mm
	Weight	459.1g	180g	183.4g	160g	160g	510g	435g	480g
	Operating Temperature	-40°C ~ 75°C (-40°F ~ 167°F)							

Unmanaged Industrial Switches

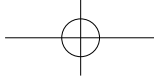


Model		INS-8108E	INS-8408A	INS-8408E	INS-802E	Woodpecker 7015-8GT2GS-I	INS-840G	Woodpecker 7013-16GT	
Interface	RJ45	8 x 10/100	8 x 10/100/1000	8 x 10/100/1000	8 x 10/100	8 x 10/100/1000	16 x 10/100/1000	16 x 10/100/1000	
	SFP	-	-	-	2 x FX/GbE	2 x GbE	-	-	
Hardware	Jumbo Frame (Bytes)	9216	9K	9K	9216	10K	10K	10K	
	MAC Entries	4K	8K	8K	8K	8K	8K	8K	
	Fan-less	Y	Y	Y	Y	Y	Y	Y	
	Automatic MDI/MDI-X on RJ-45	Y	Y	Y	Y	Y	Y	Y	
	Switching Fabric	1.6Gbps	16Gbps	16Gbps	5.6Gbps	20Gbps	32Gbps	32Gbps	
Power	DC Power Input	12 ~ 48VDC	9 ~ 57VDC	9 ~ 57VDC	12 ~ 48VDC	24 ~ 48VDC	12 ~ 60VDC	12 ~ 48VDC	
	Redundant Power	Y	Y	Y	Y	Y	Y	Y	
	Max Power Consumption	1.8W	5W	5W	12W	11W	12W	12W	
Installation & operation information	Dimensions (W x H x D)	110 x 74 x 31 mm	50 x 116 x 100mm	50 x 116 x 100mm	50 x 160 x 120mm	50 x 116 x 100mm	50 x 160 x 120mm	50 x 160 x 120mm	
	Weight	145g	480g	480g	780g	550g	840g	550g	
	Operating Temperature	-40°C ~ 75°C (-40°F ~ 167°F)							

Unmanaged Certified Switches



Model		INS-8005M	INS-8405M	IEN-9425-RW	IEN-9425-SS	IEN-9428-RW	IEN-9428-SS	INS-840GM	
Interface	RJ45	5 x 10/100	5 x 10/100/1000	5 x 10/100/1000	5 x 10/100/1000	8 x 10/100/1000	8 x 10/100/1000	16 x 10/100/1000	
	SFP	-	-	2 x GbE	2 x GbE	2 x GbE	2 x GbE	-	
Hardware	Jumbo Frame (Bytes)	1536	9K	10K	10K	10K	10K	10K	
	MAC Entries	1K	2K	8K	8K	8K	8K	8K	
	Fan-less	Y	Y	Y	Y	Y	Y	Y	
	Automatic MDI/MDI-X on RJ-45	Y	Y	Y	Y	Y	Y	Y	
	Switching Fabric	1Gbps	10Gbps	14Gbps	14Gbps	20Gbps	20Gbps	32Gbps	
Power	DC Power Input	18 ~ 30VDC	9 ~ 48VDC	20 ~ 60VDC	20 ~ 60VDC	12 ~ 60VDC	12 ~ 60VDC	12 ~ 60VDC	
	Redundant Power	-	-	-	-	Y	Y	-	
	Max Power Consumption	3W	4W	13W	13W	13W	13W	12W	
Installation & operation information	Dimensions (W x H x D)	24 x 110 x 74mm	24 x 110 x 74mm	50 x 160 x 120mm	50 x 160 x 120mm	50 x 160 x 120mm	50 x 160 x 120mm	50 x 160 x 120mm	
	Weight	145g	160g	869g	869g	930g	930g	840g	
	Operating Temperature	-40°C ~ 75°C (-40°F ~ 167°F)							
Certification	Approval	DNV	DNV	EN 50155 EN 50121-4	IEEE 1613 IEC 61850-3	EN 50155 EN 50121-4	IEEE 1613 IEC 61850-3	DNV	



บริษัท อีเอ็นที กรุ๊ป จำกัด

ตัวแทนจำหน่ายอย่างเป็นทางการในประเทศไทย



ABOUT VOLKTEK

Volktek believes that technology is for people and makes technology easy to use and affordable. This principle reflects the choice of company name Volktek, which is derived from the German words for "people" and "technology."

Volktek is a provider of optical Ethernet solutions and products for high quality, radiation-free long distance data transmission.

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