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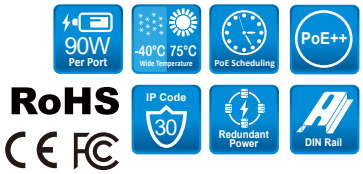
Hawkeye 9060

Managed 4 x 10/100/1000 PoE++ & 2 x GbE SFP Industrial Switch



Description

Hawkeye 9060 Series Managed Gigabit Industrial switch is equipped with 4 IEEE 802.3bt 90W PoE++ ports, 2GbE SFP slots, and 2 Digital inputs, for the growing demands of IP applications needing high-power and Gigabit speed data transmissions with smart systems. The Hawkeye 9060 series is a scalable, cost-effective, and future-proof solution with backward compatibility that includes 802.3af/at PoE standards for building automation and outdoor surveillance systems, as well as smart city applications that use sensors.

Engineered with hardened components and enclosed in an IP30 rugged case, this ethernet solution is ideal for outdoor and critical applications that need continuous operation and the supply of power. Hawkeye 9060 Series has a wide operation range from -40°C to 75°C and excellent tolerance capability to high vibration and shock.

Hawkeye 9060 Series offer 360W and 240W of power supply in its existing versions. Hawkeye 9060, with 48~57V DC high voltage power input, supports 10KBytes jumbo frames, offers management features and protects the network. Among it's features it offers network aggregation qualities with ModbusTCP and LLDP protocols, PD automation capabilities with uninterrupted power, a reliable network with super-fast recovery in milliseconds, and network monitoring by visualizing all network devices on its topology map.

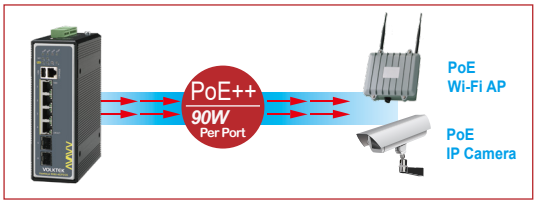
Features Highlight

Robust Switch Performance

Hawkeye 9060 is built with IP30 aluminum case protection, surge and ESD protection to deliver robust performance and withstand extreme conditions in Industrial environments. The SFP ports support 1000Mbps for high bandwidth transmissions and the SFP DDM feature enables service providers to monitor SFP parameters. In case of any abnormal hardware condition, the switch automatically sends warnings through email and relay output with real-time alarm messages. This assists the system administrators to immediately react to emergency events and diagnose the faults more efficiently for smoother network operations.

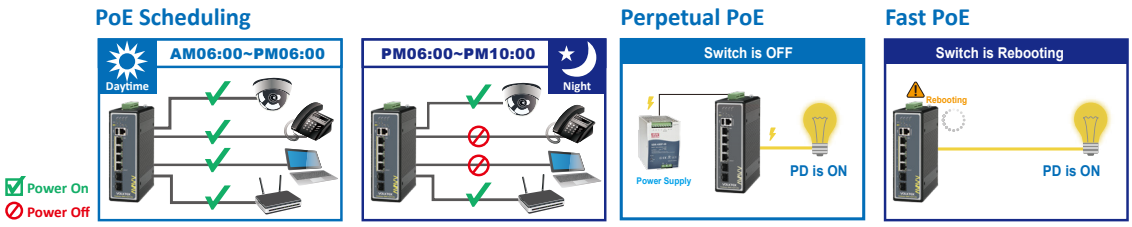
High-Power Budget for PoE Network Devices

To fulfill the growing demand of high-bandwidth, high-power PoE for network applications and eliminating the cost of electrical cabling and circuits, the Hawkeye 9060 Series switch is designed under IEEE 802.3bt standard PoE.
With PoE++, the switch allows simple "plug and play" PoE to meet the growing demand for high power-consuming PoE devices such as LED luminaire, PTZ IP Cam, etc. Using SNMP and Web interface, with smart PoE functions on each port can be enabled and disabled to save power and energy. This makes Hawkeye 9060 Series a very convenient and well-suited solution for smart home and building automation applications.



Intelligent PoE++ for powered devices

The Hawkeye 9060 is designed with intelligent PoE++ features to utilize power more efficiently. To monitor real-time status of PDs, the switch sends alive-checking packets to PDs. This reduces management burden and increases system reliability. Using power scheduling mechanism of the switch, administrators can set power on each port to a desired hourly/weekly schedule and can enable or disable the power output to these devices accordingly.



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Features Highlight

Redundant Power system

Mission-critical industrial applications need to operate without any interruptions because even a minimum network downtime can hugely impact the overall output. Hawkeye 9060's redundant power assures continous power, designed with the industrial standard terminal block for redundant power. In case the primary power supply fails, the secondary power will enable the switch to provide continuous service and an alarm with will inform technicians of the event.

Efficient network monitoring and proactive capability

To ammend the issues that impact network performance quickly, Hawkeye 9060 Series uses the most accepted protocols, SNMP and RMON, for traffic management, monitoring and analysis. SNMP allows end users to centrally manage different levels in a network, and RMON gives the capability to monitor the network performance. Service providers can ensure a reliable network by identifying connectivity and performance issues and isolating the problem remotely on individual switches. This avoids high OPEX and provides administrators the control they need to manage a healthy and efficient network.

Bandwidth management to prevent unpredictable network status

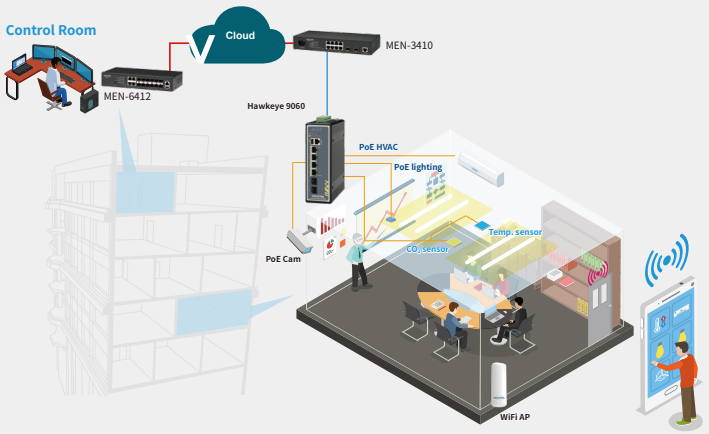
Industrial surveillance applications need different levels of services delivered to them reliably without any transmission delays and interruptions. The Hawkeye 9060 Series has comprehensive QoS mechanisms which assign priority to applications and sends only specific dedicated traffic to them. In addition, bandwidth management function of the switch allocates high bandwidths to mission-critical communications and reduce the bandwidth to applications that are less critical. With full bandwidth control, the administrators can prevent unpredictable errors and utilize it efficiently.

Redundant Ring and Fast Recovery for Surveillance System

To avoid link downtimes that may cause big inconvenience in IP systems of smart infrastructures Volktek solutions use Xpress Ring, to restore connection failures within less than 10ms and recover rapidly.

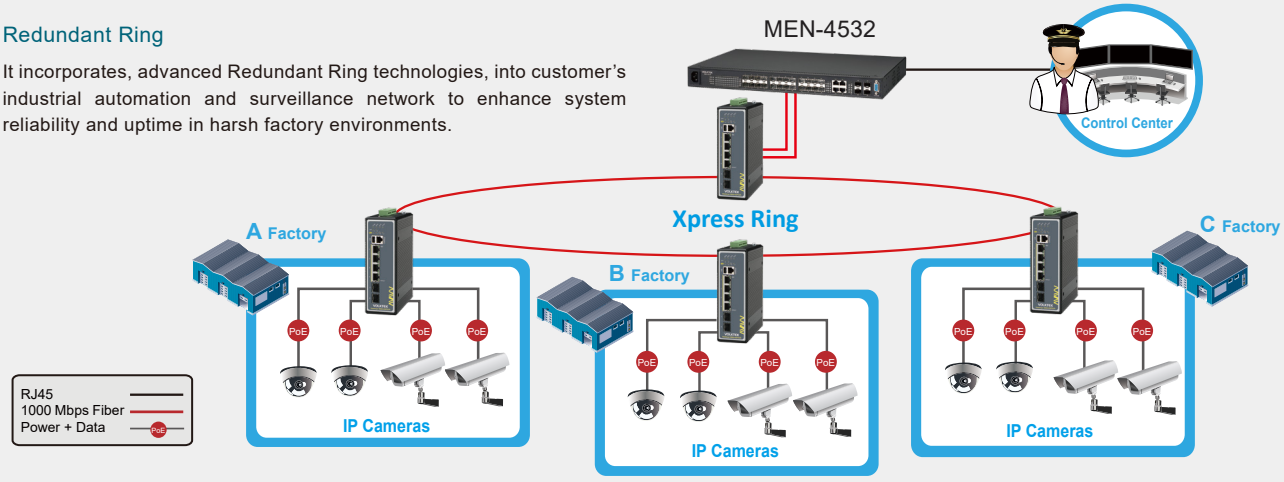
Applications

The Hawkeye 9060 Series switch is designed with 10/100/1000Mbps RJ45 90W PoE++ ports and digital input to agregate surveillance, smart light and HVAC systems.



Redundant Ring

It incorporates, advanced Redundant Ring technologies, into customer's industrial automation and surveillance network to enhance system reliability and uptime in harsh factory environments.



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Specifications

Standards	
IEEE 802.3	10BASE-T
IEEE 802.3u	100BASE-TX
IEEE 802.3ab	1000BASE-T
IEEE 802.3z	1000Base-SX/LX
IEEE 802.3	Nway Auto-negotiation
IEEE 802.3x	Flow Control
IEEE 802.1ad	Link Aggregation
IEEE 802.3af	Power over Ethernet
IEEE 802.3at	Power over Ethernet Plus
IEEE 802.3bt	4 pairs PoE type 3/type 4
IEEE 802.3az	Energy Efficient Ethernet
IEEE 802.1AB	LLDP
IEEE 802.1ad	QinQ
IEEE 802.1D	STP
IEEE 802.1w	RSTP
IEEE 802.1s	MSTP
IEEE 802.1p	Class of service, priority protocols
IEEE 802.1Q	VLAN tagging
IEEE 802.1X	Port Authentication
IEEE 1588v2	PTP
Interface	
Ports	4 x 10/100/1000BASE-T (PoE RJ45) 2 x GbE SFP Slots 1 x RJ45 Console Port 1 x USB Port
DIP Switch	Primary/Redundant Power Voltage Drop Alarm setting
LED Panel	PWR, RPS, ALM, POST, SFP, PoE, 1000M, LNK/ACT Green: 802.3bt PoE power is delivered. Amber: 802.3at/af PoE power is delivered. Off: No incoming or outgoing PoE power
DI ports	2 x Dry contacts of Digital Input
Features	
Performance	Jumbo frame Size: 10KBytes MAC Table Entries: 16K Active VLAN: 4K Switch Fabric: 12Gbps L2 Forwarding Rate: 8.9Mpps
Management	CLI, Telnet, SSH, HTTP, HTTPs, SNMP v1/v2c, SNMP v3, SNMP Trap, MIB, RMON, Management VLAN (MVLAN), Firmware upgradable, Configuration Backup/Restore, Syslog, PTP, SNTP, LLDP, DHCP Client/Relay/Option 66/67/82, Port Mirroring, Server (service) control, Port Utilization, Alarm Information, Email Alarm, ModbusTCP, Power Down trap, DDMI Support, Topology Map, Port Configuration(enable/disable, speed/duplex), ONVIF, Port Statistic, System reboot from remote side, User Account with authority
Reliability	STP/RSTP/MSTP, Xpress Ring, ERPS v1/v2, Dual Homing, LACP, Code Redundancy, Dual Xpress-ring, Static Trunk
VLAN	IEEE 802.1Q, GARP/GVRP, Port-based VLAN, MAC-based VLAN, IP-based VLAN, Protocol-based VLAN, QinQ
Traffic Control	Management VLAN, MVR, QoS, Flow Control, Abnormal Traffic Detection, Rate Limit, Storm Control, Port Isolation, Loop Detection
Security	Traffic Monitor, Priority Queue, ACL, SSH, Port Security, Port-based 802.1x, TACACS+, MAC limit, MAC Search, Refusal MAC, Static MAC, DHCP Snooping, DHCP Server Screening, ARP Inspection, BPDU Guard/Filter, Root Guard, Management Host
PoE/PoE+/PoE++	Scheduling, PD Alive Check, PoE Power On/OFF, Fast PoE, Perpetual PoE, Feeding Power Budget Control, Status Monitor, Legacy mode enable/disable

Features	
IPv6	Dual protocol stack, Neighbor Discovery, Management (TELNET, HTTP, HTTPS, SSH, PING6, TACACS+), DHCPv6 Client, (DHCPv4 Option 82), DHCPv6 Relay, Default Gateway, Static Route, SNMP, SNMP Trap, Syslog, SNTP, Auto-provisioning, MLDv1/v2, ACL, ARP
L3 Routing	Static Route
Power	
Input Voltage	Primary inputs: 48~57VDC Redundant inputs: 48~57VDC
Connection	Teminal Block
Power Consumption	System: 20W PoE Power Budget Hawkeye 9060-4GP2GS-240W-I: 240 Watt Hawkeye 9060-4GP2GS-360W-I: 360 Watt
Alarm Relay	One relay output, 1A @ 24V DC
Mechanical and Environment	
Housing	Aluminum (IP30 Protection)
Mounting	DIN-Rail
Operating Temperature	-40°C~75°C (-40°F~167°F)
Storage Temperature	-40°C~85°C (-40°F~185°F)
Operating Humidity	5 to 95% RH (non-condensing)
Storage Humidity	5 to 95% RH (non-condensing)
Weight	970 g (2.14 lb)
Dimension (WxHxD)	50 x 160 x 110 mm (2.0 x 6.3 x 4.3 in)
Certifications	
EMI	FCC Part 15 Subpart B Class A EN 55011:2016 Class A EN 55032: Class A EN 61000-6-4
EMS	EN 55024 EN 61000-6-2 EN 61000-4-2 (ESD) EN 61000-4-3 (RS) EN 61000-4-4 (Burst) EN 61000-4-5 (Surge) EN 61000-4-6 (CS) EN 61000-4-8 (PFMF)
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-31
Vibration	IEC 60068-2-6
Ordering Information	
Hawkeye 9060-4GP2GS-240W-I	L2+ Managed 4 x 10/100/1000 PoE++ & 2 x GbE SFP Switch, 240Watt PoE budget
Hawkeye 9060-4GP2GS-360W-I	L2+ Managed 4 x 10/100/1000 PoE++ & 2 x GbE SFP Switch, 360Watt PoE budget
Optional Accessories	
Power Supply	SDR-480P-48: 480W DIN-Rail 48V DC Industrial Power Supply, -25°C~70°C (-13°F~158°F)
GBM-104	1000BASE-SX 1.25G, Multi-mode SFP, 500m
GBM-123TS	1000BASE-LX, Bi-Di SFP TX:1310/RX:1550 Single Mode, 10Km, 0°C~70°C (-32°F~158°F)
GBM-123RS	1000BASE-LX, Bi-Di SFP TX:1550/RX:1310 Single Mode, 10Km, 0°C~70°C (-32°F~158°F)

Note :

** The SFP communication distance upon the request.*

** Industrial SFP with wide operating temperature from -40°C~85°C (-40°F~185°F) is available upon request.*

** Specifications subject to change without notice.*

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Dimension