



* Certified Cisco Replacement (CCR)

KY-16PSE30WM (with CYBER-SECURE Video)

Industrial 16-Port Rack-Mount Managed Gigabit PoE Ethernet Switch

With 16x10/100/1000Base-T(X) P.S.E. ports and 4x1000Base-X, SFP sockets

Features:

**Cyber-Secure Video
with
Clean Code Technology
802.3at & 802.3az
HD CAMERA READY!**



- * HD Camera Ready & Contractor Certified for Easy Installation
- * ONVIF Network Tested and Certified for Camera and HD Camera Support
- * Supports Jumbo Frames Up to 9K Bytes (Recommended for Video Applications)
- * 16 Ports PSE - Fully Compliant IEEE802.3at, provides up to 30 Watts per port
- * All 16 Ports are PSE - and can be used to deliver up to 30 Watts - All Ports - All The Time
No More Trying to remember or figure out a power budget!
- * AC 110 Volt Power Supply included (Ready to Plug In) No other power source is required.
- * Application Based Video Management - (Best way to support video applications)
- * Built in silicon - Automatic Detection And Prevention of Denial of Service and Distributed Denial of Service Attacks (DOS/DDOS). Every port auto-detects attacks and can shut down automatically without the intervention of the network operator.
- * **CYBER-SECURE Video** with Clean Code Technology for Network Device Security - protects against virus, BOTS and Hacking attacks. Eliminates contaminated code and secures video / data streams
- * Access Control Lists (ACL) and 802.1x User Authentication for Security
- * IGMP v2/v3 (IGMP snooping and filtering for Multicast Traffic)
- * Multiple Notifications for Unexpected Network Events
- * Supports LLDP Protocol (Auto Discovery) and IP Policing Security Functions
- * KUSA's Recovery time <10ms over 300 switches (MSTP / RSTP / STP / RSTPe (IEEE802.1s/w/D) for Ethernet Redundancy
- * **11 Inch Device - 1.5RU 19" Rack Mountable Design - 5 Year Warranty**



Clean Code Technology with Silicon Enhancements

Introduction

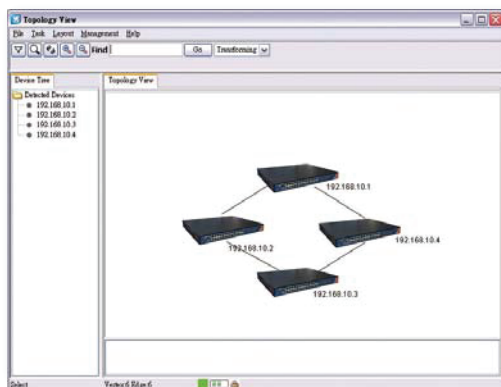
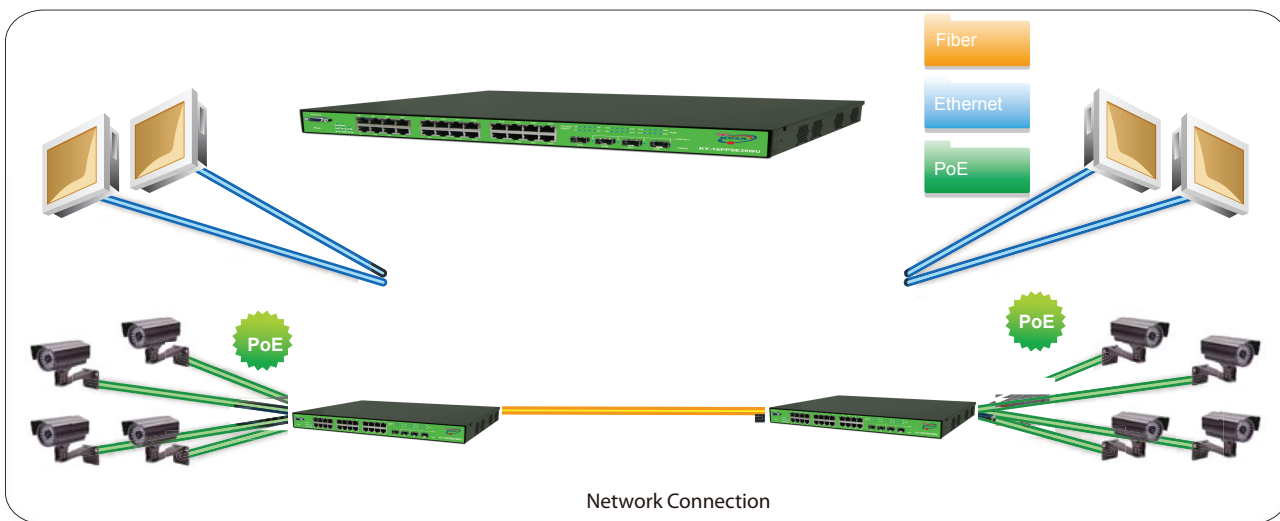
The KY-16PSE30WM, - is a managed redundant ring POE Ethernet switch with 16 x10/100/1000Base T(x) and 4 x100/1000Base X SFP Sockets. Enhanced silicon extensions combined with Clean Code Technology provide for a secure, virus and Bot resistant switch able to automatically contain and quench possible Denial of Service or Distributed Denial of Service (DOS / DDOS) attacks, without network operator intervention. This is 21st Century Security for networks that secure every device - not just the perimeter devices. IP / MAC address auto identification and network lock down, is another feature used to lock down attached devices to the network - automatically. Meets new federal guidelines for Cyber-space port security and network security. Clean Code Technology insures no contaminated or unused code elements.

The switch provides Power over Ethernet Technology (802.3at), and the ability to provide up to 30 Watts on all copper ports - all the time. Our product also complies with 802.3az (Green Scheduling). The 802.3az specification allows the scheduling of powered devices (PD's) on & off - saving energy and money. A smaller carbon footprint - saving customers money over the life of the product, combined with automatic device restart, automated keep alive checking - (important for cameras) makes for a secure and reliable network. Every KUSA Ethernet switch is camera ready, HD camera certified and tested. ONVIF network tested and certified. All switches are temperature hardened -40C to 80C. Every switch is designed to outperform all competitive products, are fanless (convection cooled) and comes with a full 5 Year Warranty.

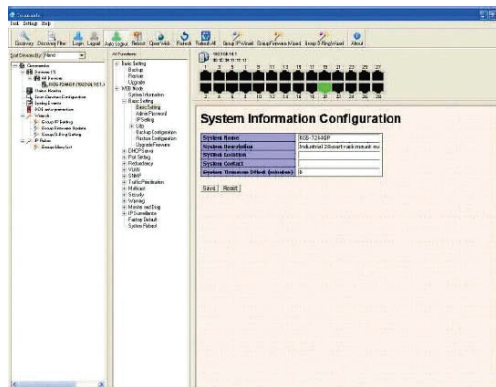
Ultra-Low Power Consumption - Saving You Money Every Day!

Industrial Ethernet Switch

Application

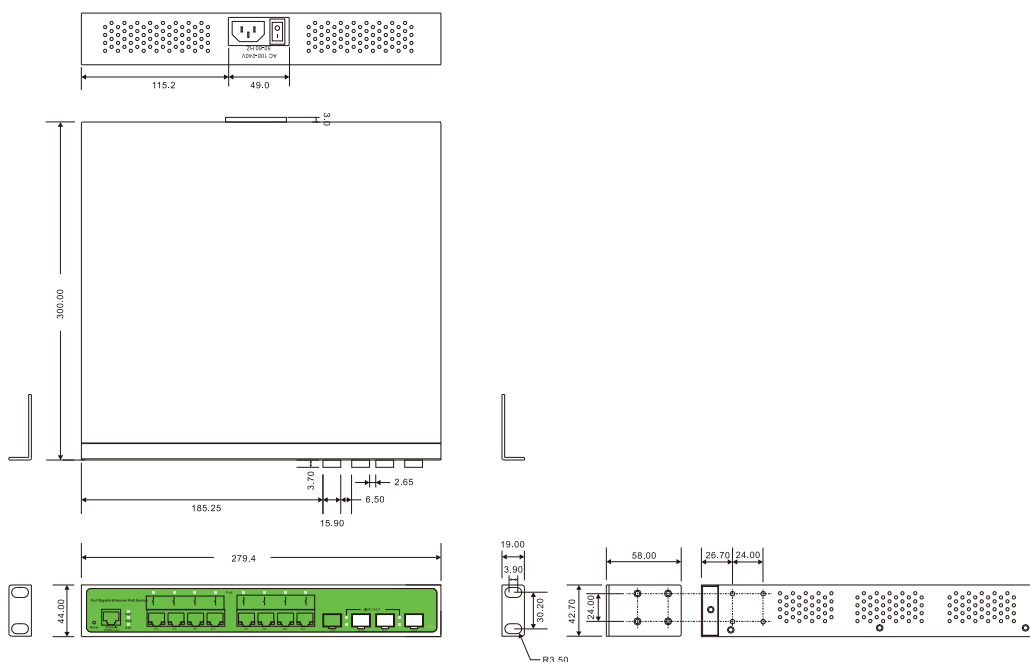


Topology View



Monitoring and Configuration interface

Dimensions



(Unit=mm)

Industrial Ethernet Switch

Specifications

KUSA Switch Model	16PSE30WM
Physical Ports	
10/100/1000 Base-T(X) Ports in RJ45 Auto MDI/MDIX with P.S.E	16 (30 Watts per port)
1000Base-X SFP Port	4
Technology	
Ethernet standards	IEEE 802.3 for 10BaseT IEEE 802.3u for 100Base-TX IEEE 802.3z for 1000Base-X IEEE 802.3ab for 1000Base-T IEEE 802.3x for Flow control IEEE 802.3ad for LACP (Link Aggregation Control Protocol) IEEE 802.1D for STP (Spanning Tree Protocol) IEEE 802.1p for COS (Class of Service) IEEE 802.1Q for VLAN Tagging IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol) IEEE 802.1x for Authentication IEEE 802.3at PoE specification (up to 30 Watts per port for P.S.E.)
MAC table	8192 MAC addresses
Priority queues	4
Processing	Store-and-Forward
Switch properties	Switching latency : 6 μ s Switching bandwidth : 24Gbps Max. Number of Available VLANs : 256 IGMP multicast groups : 128 for each VLAN Port rate limiting : User Defined
Jumbo frame	Up to 9K Bytes
Security features	IP Police security feature / CYBER-SECURE Video / Clean Code Technology Enable/disable ports, MAC based port security Port based network access control (802.1x) VLAN (802.1Q) to segregate and secure network traffic Radius centralized password management SNMPv3 encrypted authentication and access security
Software features	STP/RSTP/MSTP (IEEE 802.1D/w/s) Redundant Ring with recovery time less than 10ms over 300 units TOS/Diffserv supported Quality of Service (802.1p) for real-time traffic VLAN (802.1Q) with VLAN tagging and GVRP supported IGMP Snooping IP-based bandwidth management Application-based QoS management DOS/DDOS auto prevention Port configuration, status, statistics, monitoring, security DHCP Client/Server, Protocol 41 (IPv6 and IPv6 Secure)
Network redundancy	Ring STP / RSTP MSTP / RSTPe
RS-232 Serial Console Port	RS-232 in RJ45 connector with console cable. 115200bps, 8, N, 1
LED Indicators	
Power indicator (PWR)	Green : Power indicator
System ready indicator (STA)	Green : Indicates system ready. Blinking for system is upgrading firmware
Ring Master indicator (R. M.)	Green : Indicates that the system is operating in Ring Master mode
Ring indicator (Ring)	Green : Indicates the system is operating in Ring mode. Blinking to indicate Ring is broken.
System running indicator (RUN)	Green : System operated continuously
Reset to default running indicator (DEF)	Green : System reset to default configuration
PoE indicator	Blue : PoE LED x 8
10/100/1000Base-T(X) RJ45 port indicator	Green for port Link/Activity - Amber for Duplex/Collision
1000Base-X SFP port indicator	Green for port Link/Activity

Industrial Ethernet Switch

Power	
Power Input	AC 100~240V, 50~60Hz
Overload current protection	YES
Physical Characteristics	
Enclosure	11 inches rack-mountable
Dimensions (W x D x H)	279.4(W)x300(D)x44(H) mm (11 x 11.81 x 1.73 inch)
Weight (g)	2950 g
Environmental	
Storage temperature	-40 to 85°C (-40 to 185°F)
Operating temperature	-40 to 80°C (-40 to 176°F), Fanless - Convection Cooled
Operating humidity	5% to 95% Non-condensing
Regulatory Approvals	
EMI	FCC Part 15, CISPR (EN55022) class A
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-11, EN61000-4-8, EN61000-4-6 (CS)
Shock	IEC60068-2-27
Free fall	IEC60068-2-32
Vibration	IEC60068-2-6
MTBF (Hours) (MIL-HDBK-217F2, GB, GC, 25°C)	69,343
Warranty	5 years
Cryptologic	
Cyber-Secure Video - (CSV)	NSA / CSS Coding Guidelines / with Silicon Enhancements
Clean Code - Precision Programming	Precision Certified Code Streams
Exceeds NEMA TS-2 for Traffic Control Equipment	



	Model	Description
ORDER Model	KY-16PSE30WM	Industrial 20-port rack-mount managed Gigabit PoE Ethernet switch with 16 x 10/100/1000Base-T(X) PSE and 4x1000Base-X, SFP socket, power supply included, US power cord
	KY-16PSE30WM_EU	Industrial 20-port rack-mount managed Gigabit PoE Ethernet switch with 16 x 10/100/1000Base-T(X) PSE and 4x1000Base-X, SFP socket, power supply included, EU power cord
Packing List		Optional Accessories (Can be purchased separately)
<ul style="list-style-type: none"> • KY- 16PSE30WM • Rack-Mount Kit • Console Cable • Power Cable • Tool CD • Quick Installation Guide 		<ul style="list-style-type: none"> • Fiber & Copper Patch Cords • Gigabit SFP's - Single Mode, Multi Mode, or Copper

KUSA
1107 SE Willow Place
Blue Springs, Missouri 64014



Telephone: (219) 595 - 2631
(816) 988 - 7861
FAX: (480) 287 - 8605
Email: Sales@KUSA1.co