8*10/100/1000Base-T + 2*1G/2.5Base-X SFP

Layer 2 Managed Industrial Ethernet Switch

DK3210MI-8T2S-E Series

Features

➤ 8*10/100/1000Base-T RJ45 ports, 2*1000/2500Base-X SFP slots

➤ Redundant power 12-58V input with polarity reverse/over-voltage/over-current protection

➤ Support USB one key configuration and upgrading

➤ Support DI/DO/RS485/Modbus data

➤ Support Layer 2 management function: VLAN/VLAN Classification/QinQ/STP, RSTP,

　　MSTP/Port Mirroring/DHCP/Multicast/ACL/IGMP/QoS/LLDP/802.1X/Dying Gasp/SFP

　　DDM/IPV6 management/Web/SNMP/Telnet/TFTP/Web upgrading

➤ Support G.8032 ERPS protocol, recovery time ≤20ms

➤ Support 6KV surge protection and ESD: Air-15kV, Contact-8kV Protection

➤ IP40 fan-less and Din-rail hardware design

➤ Operation temperature: -40 ℃ ~+75℃

Overview

The DPTEK DK3210MI-8T2S-E series are highly reliable managed industrial Ethernet switch with 8-port 10/100/1000-T RJ45 and 2-port 1000/2500Base-X fiber optical interfaces. They support ERPS redundant

network and the self-recovery mechanism is less than 20ms on full load which allows you to scheme a reliable Ethernet network by building a redundant ring topology as your back-up solution. DK3210MI-8T2S-E series also support DI/DO/RS485/Modbus data and robust layer 2 management function, which can fulfill the special needs of industrial automation applications.

DK3210MI-8T2S-E series are also high cost-effective easy-to-use devices, which provide essential industrial Ethernet networking function, including wide range power input 12-58VDC, redundant power design with polarity reverse/over-voltage/over-current protection, robust IP40 fan-less housing with Din-rail installation, wide operation temperature from -40°C to 75°C as well as high-level EMI/EMC capability. They are the best choice for heavy industrial factory, transportation, oil & gas, chemical, IP Surveillance and processing automation area where environmental conditions are harsh and critical.

Technical specification

Model No.	DK3210MI-8T2S-E / DK3210MI-8T2S-E-D	
Interface	Fiber ports	Copper RJ45 ports
	2	8
Ethernet	8*10/100/1000Base-T RJ45 2*1000/2500Base-X SFP	
Management port	1*RJ45 Console port，1*USB 2.0（optional）	
Data channel(optional）	1 channel RS485 1 channel DI(digital input) 1 channel DO(digital output)	
Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Ethernet IEEE 802.3ab 1000Base-T Ethernet IEEE 802.3z 1000Base-X Ethernet IEEE802.3x Flow Control and Back Pressure IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.1Q VLAN ITU-T G.8032 ERPS IEEE 802.1X Port Authentication Network Control IEEE 802.1ab LLDP IEEE 802.3ad LACP	
LED Indicators		
P (Power indicator)	Off: the device is power off or failed	On: the device power on is normal
S(System status indicator)	Blinking: device initialization	On: device on normal operation
USB (USB status indicator)	Off: USB flash drive not insert or not detected by device	
	On: USB flash drive is detected by device	

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	Blinking: the device is reading and writing the data from USB flash drive	
ALM(Fault status indicator) Red	Off: Device on normal working state	On: Fault alarm
1-8 (Copper ports indicators) Green	Off: ports link down	
	On: ports link up	
	Blinking: data on TX/RX	
1-8(Port speed indicators) Yellow	Off: ports on 10/100M	
	On: ports on 1000M	
9-10(Fiber ports indicators) Green	Off: ports link down	
	On: ports link up	
	Blinking: data on TX/RX	
Power parameter		
Input voltage	12-58VDC, redundant power input	
Input current	0.9A Max	
Total power consumption	Full loading ≤10W	
Connector	Removable 4-pin terminal block	
Reverse polarity protection	Support	
Over-voltage protection	Support	
Over-current protection	Support	
Layer 2 function		
Port aggregation	Support GE port aggregation Support 2.5GE aggregation Support static aggregation Support dynamic aggregation	
Port features	Support IEEE802.3x flow control, Support port traffic statistics, Support port isolation Support network storm suppression based on port bandwidth percentage	
VLAN	Support access mode Support trunk mode Support hybrid mode	
VLAN Classification	Mac Based VLAN IP Based VLAN Protocol Based VLAN	
QinQ	Port-based QinQ VLAN-based QinQ	

	Flow-based QinQ
Port mirroring	Many to one port mirroring
Ring network protocol	Support STP、RSTP、MSTP Support G.8032 ERPS protocol，single ring, sub Ring and associated sub ring Recovery time ≤20ms
DHCP	Support DHCP Client Support DHCP Snooping
Multicast	IGMP V1,V2,V3 IGMP snooping
ACL	IP Standard ACL MAC extend ACL IP extend ACL
QoS	Support QoS Class, Remarking Support SP, WRR queue scheduling Ingress Port-based Rate-limit Egress Port-based Rate-limit Support Policy-based QoS
Security	Support Dot1x，port authentication，MAC authentication，RADIUS service Support port-security Support IP Source Guard，IP/Port/MAC binding Support ARP-check and ARP packet filtering for illegal users Support port isolation
Management & maintenance	Support LLDP Support user management and login authentication Support SNMPV1/V2C/V3 Support web management, HTTP1.1, HTTPS Support Syslog and alarm grading Support RMON(Remote Monitoring) alarm Support NTP Support temperature monitoring Support Ping , TRACERT Support optical transceiver DDM function Support TFTP Client Support Telnet Server Support SSH Server Support IPv6 Management Support TFTP, web upgrading Support USB upgrading Support USB importing configuration
Switching features	

Switching capacity	26Gbps
Packet forwarding rate	38.6Mpps
MAC address table	16K
VLAN	4K
Buffer	12Mbit
Forwarding delay	<5us
Jumbo Frame	Support 10Kbytes
MDX/MIDX	Support
Watchdog	Support
Mechanical structure	
Case protection	IP40
Installation method	Din-rail
Dimension(W*D*H)mm	54*115*158mm
Weight	DK3210MI-8T2S-E (1.08 kg); DK3210MI-8T2S-E-D (1.28 kg)
Operating environment	
Operating temperature	-40℃~+75℃
Storage/transportation temperature	-40℃~+85℃
Relative humidity	Operation humidity: 10%-90%RH Storage humidity: 5%-95%RH
Industrial Standard	
EMS	Surge protection of power: IEC 61000-4-5 6KV/4KV（8/20us） Surge protection of Ethernet ports: IEC 61000-4-5 6KV/2KV（10/700us） RS：IEC 61000-4-3 80 MHz-1 GHz：10 V/m EFT：IEC 61000-4-4 4K/2K CS：IEC 61000-4-6 10V ESD：IEC 61000-4-2 Contact: 8K；Air: 15K
EMI	FCC Part 15B Class A
Shock	IEC 60068-2-27
Free fall	IEC 60068-2-32

Vibration	IEC 60068-2-6
Certification	CE/FCC/RoHS
Warranty	5 years

Structure diagram

DK3210MI-8T2S-E
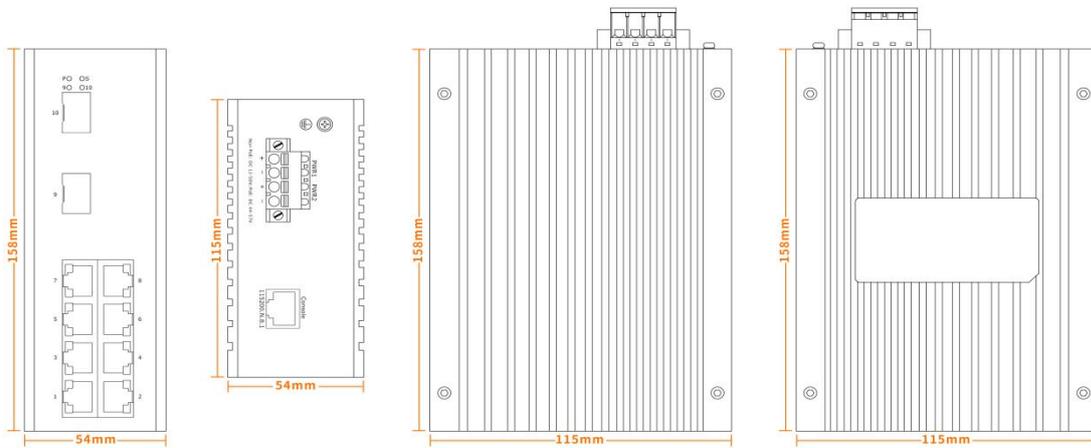
DK3210MI-8T2S-E-D
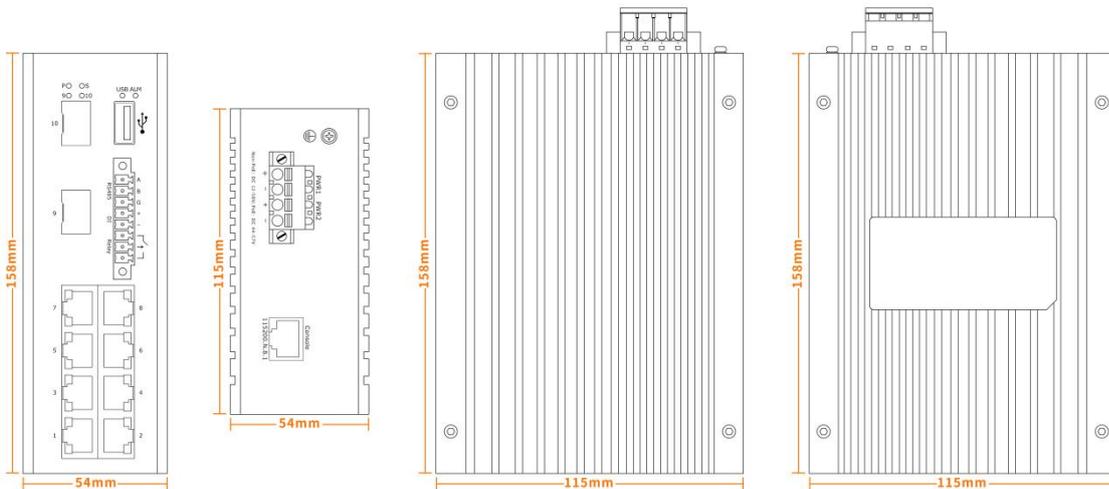
Order information

Model	Description
DK3210MI-8T2S-E	Layer 2 Managed industrial Ethernet switch with 8*10/100/1000Base-T RJ45 ports and 2*1G/2.5GBase-X SFP slots, DC12-58V input, redundant dual power supply, Din-rail installation. Operation temperature: -40℃～+75℃
DK3210MI-8T2S-E-D	Layer 2 Managed industrial Ethernet switch with 8*10/100/1000Base-T RJ45 ports and 2*1G/2.5GBase-X SFP slots, supports DI/DO/RS485/Modbus data, DC12-58V input, redundant dual power supply, Din-rail installation; Operation temperature: -40℃～+75℃