

8*10/100/1000Base-T PoE + 2*1G/2.5GBase-X + DI/DO/RS485/Modbus

Layer 2 Managed Industrial PoE Switch

DK3210MI-8TP2S-D



Features

- 8*10/100/1000Base-T RJ45 PoE ports, 2*1000/2500Base-X SFP ports
- DC 44~57V input, redundant power supply with polarity reverse/over-voltage protection
- Complies with IEEE802.3af PoE and IEEE802.3at PoE+ standard
- Support USB one key configuration and upgrading
- Support DI/DO/RS485/Modbus data
- Support Layer 2 management function:
 - VLAN/Port Mirroring/IGMP/QoS/LLDP/802.1X/ Fiber transceiver DDM
 - /PoE management/IPV6 management/Web/SNMP/Telnet/TFTP/Web upgrading
- Support G.8032 ERPS protocol, recovery time $\leq 20\text{ms}$
- Support 6KV surge protection and ESD: Air-15kV, Contact-8kV Protection
- IP40 fan-less and Din-rail hardware design
- Operation temperature: $-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$

Overview

The DPTEK DK3210MI-8TP2S-D is the highly reliable managed industrial PoE switch with 8-port 10/100/1000-T PoE and 2-port 1000/2500Base-X fiber optical interfaces. It complies with IEEE802.3af, IEEE802.3at standard PoE protocol, the Max power consumption can reach 30W (PoE+) per port. It supports DI/DO/RS485/Modbus

data and USB one key configuration and upgrading. DK3210MI-8TP2S-D also supports layer 2 managed functions, such as QoS, VLAN, IGMP, Port mirroring, 802.1X, STP, RSTP, G.8032 ERPS, LLDP, Fiber transceiver DDM, PoE management, IPV6 management and so on

DK3210MI-8TP2S-D is also high cost-effective easy-to-use device, which provides essential industrial Ethernet networking function, including wide range power input 44-57VDC, 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. It is the best choice for heavy industrial factory, transportation, oil & gas, chemical, IP Surveillance and processing automation area where environmental conditions are harsh and crucial.

Technical specification

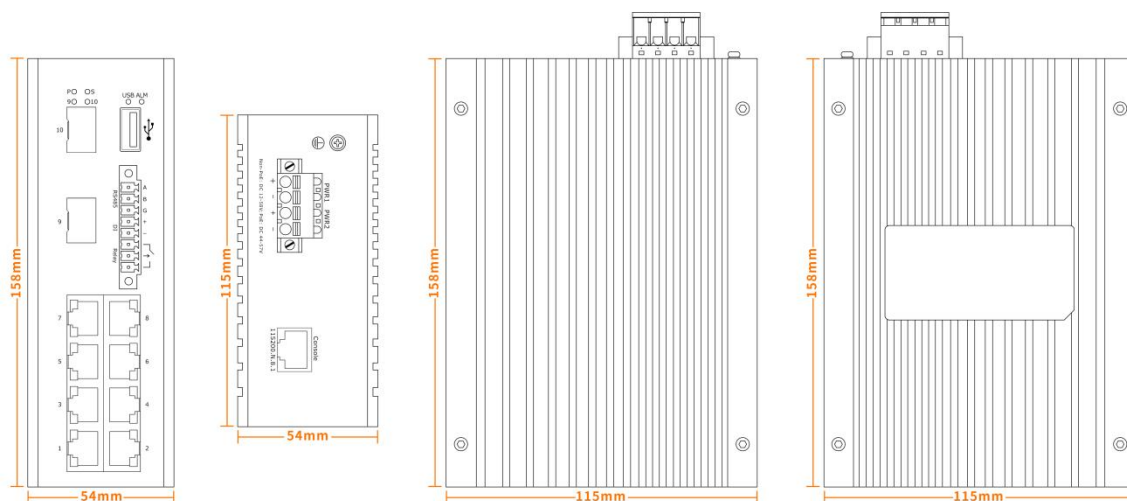
| Model No. | DK3210MI-8TP2S-D | |
|----------------------------|---|-----------------------------------|
| Interface | Fiber ports | Copper RJ45 ports |
| | 2 | 8 |
| Ethernet | 8*10/100/1000Base-T RJ45 PoE 2*1000/2500Base-X SFP | |
| Management port | 1*RJ45 Console, 1*USB 2.0 for configuration and upgrading | |
| Data channel | 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 IEEE 802.3x Flow Control and Back Pressure IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.1Q VLAN Tagging ITU-T G.8032 ERPS IEEE 802.1X Port Authentication Network Control IEEE 802.1ab LLDP IEEE 802.3ad LACP IEEE802.3af PoE IEEE802.3at PoE+ | |
| 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 | |
| | 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) | Green indicators | Yellow indicators |
| | Off: ports link down | Off: PoE not working |
| | Normal on: ports link up | On: PoE working |
| | Blinking: data on TX/RX | |
| 9-10 (fiber ports) Green | Off: ports link down | |
| | Normal on: ports link up | |
| | Blinking: data on TX/RX | |
| Power parameter | | |
| Input voltage | 44-57VDC, redundant power input | |
| Input current | 5.7A Max | |
| Total consumption | Full loading without PoE ≤10W PoE power budget ≤240W | |
| Connector | Removable 4-pin terminal block | |
| Reverse polarity protection | Support | |
| Over-voltage protection | Support | |
| Over-current protection | Support | |
| Layer 2 function | | |
| Port 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 | |
| Port mirroring | Support many to one port mirroring | |
| Ring network protocol | Support STP、RSTP Support G.8032 ERPS protocol, single ring, sub Ring and associated sub ring | |

| | |
|-----------------------------------|---|
| | Recovery time $\leq 20\text{ms}$ |
| Multicast | IGMP V1,V2,V3 IGMP snooping |
| QoS | Ingress Port-based Rate-limit Egress Port-based Rate-limit |
| Security features | Support 802.1x, port authentication, MAC authentication, RADIUS service Support port isolation |
| Management and 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 Ping , Tracert Support optical transceiver DDM function Support TFTP Client Support Telnet Server Support SSH Server Support IPv6 Management Support PoE management Support TFTP, web upgrading |
| Switching features | |
| Switching capacity | 26 Gbps |
| Packet forwarding rate | 38.6Mpps |
| MAC address table | 16K |
| VLAN | 4K |
| Buffer | 2M bit |
| 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 | 1.30 kg |
| Operating environment | |
| Operating temperature | -40°C~+75°C |
| Storage/transportation temperature) | -40°C~+85°C |
| Relative humidity | Operation humidity: 10%-90%RH Storage humidity: 5%-95%RH |
| Industrial Standard | Surge protection of power: IEC 61000-4-5 Level 3 (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 |
| | ESD: IEC 61000-4-2 Level 4 (8K/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



Order information

| Model | Description |
|-------------------------|--|
| DK3210MI-8TP2S-D | Layer 2 Managed industrial Ethernet switch with 8*10/100/1000Base-T RJ45 PoE ports and 2*1G/2.5GBase-X SFP slots, supports DI/DO/RS485/Modbus, complies with IEEE802.3af, IEEE802.3at standard, DC44-57V input, redundant dual power supply, Din-rail installation. Operation temperature: -40°C~+75°C |