

**4\*10/100/1000Base-T PoE + 2\*100/1000Base-X + DI/DO/RS485/Modbus**

## **Layer 2 Managed Industrial PoE Switch**

**DK3210MI-4TP2S-D**



### **Features**

- 4\*10/100/1000Base-T RJ45 PoE ports, 2\*100/1000Base-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 ≤20ms
- Support 6KV surge protection and ESD: Air-15kV, Contact-8kV Protection
- IP40 fan-less and Din-rail hardware design
- Operation temperature: -40°C ~+75°C

### **Overview**

The DPTEK DK3210MI-4TP2S-D is a highly reliable industrial managed PoE Switch with 4-port 10/100/1000-T PoE and 2-port 100/1000Base-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-4TP2S-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-4TP2S-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

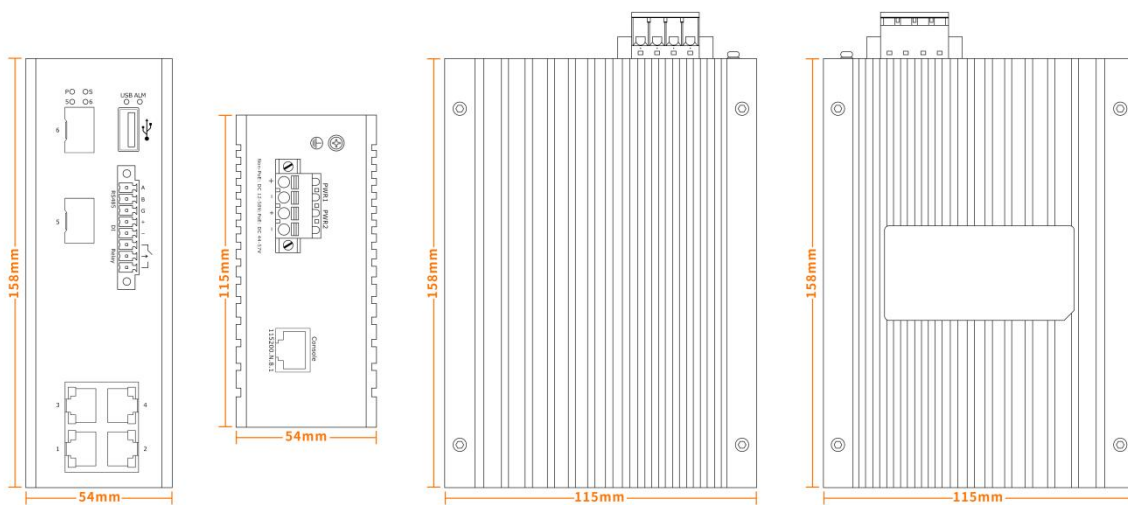
| Model No.                  | DK3210MI-4TP2S-D  |  |
|----------------------------|---|--|
| Interface                  | Fiber ports   | Copper RJ45 ports                      |
|                            | 2   | 4                                      |
| Ethernet                   | 4*10/100/1000Base-T RJ45 PoE<br>2*100/1000Base-X SFP  |  |
| Management port            | 1*RJ45 Console, 1*USB 2.0 for configuration and upgrading   |  |
| Data channel               | 1 channel RS485<br>1 channel DI(digital input)<br>1 channel DO(digital output)  |  |
| Standard                   | IEEE 802.3 10Base-T<br>IEEE 802.3u 100Base-TX<br>IEEE 802.3ab 1000Base-T<br>IEEE 802.3z 1000Base-X<br>IEEE 802.3x flow control and back pressure<br>IEEE 802.1D spanning tree protocol<br>IEEE 802.1w rapid spanning tree protocol<br>IEEE 802.1Q VLAN tagging<br>ITU-T G.8032 ERPS<br>IEEE 802.1X port authentication network control<br>IEEE 802.1ab LLDP<br>IEEE 802.3ad LACP<br>IEEE802.3af Power Over Ethernet<br>IEEE802.3at Power Over Ethernet plus PSE |  |
| LED Indicators             |   |  |
| P(Power indicator)         | Off: the device is power off or failed  | Off: the device is power off or failed |
| S(System status indicator) | Blinking: device initialization   | On: device on normal operation         |

|                                     |   |                      |
|-------------------------------------|---|----------------------|
| USB (USB status indicator)<br>Green | 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)<br>Red  | Off: Device on normal working state   | On: Fault alarm      |
| 1-4 (Copper ports)                  | Green   | Yellow               |
|                                     | Off: ports link down  | Off: PoE not working |
|                                     | On: ports link up   | On: PoE working      |
|                                     | Blinking: data on TX/RX   |                      |
| 5-6 (fiber ports) Green             | Off: ports link down  |                      |
|                                     | On: ports link up   |                      |
|                                     | Blinking: data on TX/RX   |                      |
| <b>Power parameter</b>              |   |                      |
| Input voltage                       | 44-57VDC, redundant power input   |                      |
| Input current                       | 3A Max  |                      |
| Total consumption                   | Full loading without PoE ≤6W<br>PoE power budget ≤120W  |                      |
| Connector                           | Removable 4-pin terminal block  |                      |
| Reverse polarity protection         | Support   |                      |
| Over-voltage protection             | Support   |                      |
| Over-current protection             | Support   |                      |
| <b>Layer 2 function</b>             |   |                      |
| Port aggregation                    | Support static aggregation<br>Support dynamic aggregation   |                      |
| Port features                       | Support IEEE802.3x flow control,<br>Support Port traffic statistics<br>Support port isolation<br>Support network storm suppression based on port bandwidth percentage |                      |
| VLAN                                | Support access mode<br>Support trunk mode<br>Support hybrid mode  |                      |
| Port mirroring                      | Support many to one port mirroring  |                      |
| Ring network protocol               | Support STP、RSTP<br>Support G.8032 ERPS protocol, single ring, sub Ring and associated sub ring   |                      |

|                                   |   |
|-----------------------------------|---|
|                                   | Recovery time ≤20ms   |
| <b>Multicast</b>                  | IGMP V1,V2,V3<br>IGMP snooping  |
| <b>QoS</b>                        | Ingress Port-based Rate-limit<br>Egress Port-based Rate-limit   |
| <b>Security features</b>          | Support 802.1x, port authentication, MAC authentication, RADIUS service<br>Support port isolation   |
| <b>Management and maintenance</b> | Support LLDP<br>Support user management and login authentication<br>Support SNMPV1/V2C/V3<br>Support web management, HTTP1.1, HTTPS<br>Support Syslog and alarm grading<br>Support RMON(Remote Monitoring) alarm<br>Support NTP<br>Support Ping , Tracert<br>Support optical transceiver DDM function<br>Support TFTP Client<br>Support Telnet Server<br>Support SSH Server<br>Support IPv6 Management<br>Support PoE management<br>Support TFTP, web upgrading |
| <b>Switching features</b>         |   |
| <b>Switching capacity</b>         | 12Gbps  |
| <b>Packet forwarding rate</b>     | 17.8Mpps  |
| <b>MAC address table</b>          | 8K  |
| <b>VLAN</b>                       | 4K  |
| <b>Buffer</b>                     | 1M bit  |
| <b>Forwarding delay</b>           | <5us  |
| <b>Jumbo Frame</b>                | Support 10Kbytes  |
| <b>MDX/MIDX</b>                   | Support   |
| <b>Watchdog</b>                   | Support   |
| <b>Mechanical structure</b>       |   |
| <b>Case protection</b>            | IP40  |
| <b>Installation method</b>        | Din-rail  |
| <b>Dimension(W*D*H)mm</b>         | 54*115*158mm  |

|  |  |
|--|--|
| <b>Weight</b>                              | 1.27 kg  |
| <b>Operating environment</b>               |  |
| <b>Operating temperature</b>               | -40°C~+75°C  |
| <b>Storage/transportation temperature)</b> | -40°C~+85°C  |
| <b>Relative humidity</b>                   | Operation humidity: 10%-90%RH<br>Storage humidity: 5%-95%RH          |
| <b>Industrial Standard</b>                 | 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                               |
|  | 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   |
| <b>Certification</b>                       | CE/FCC/RoHS  |
| <b>Warranty</b>                            | 5 years  |

### Structure diagram



## Order information

| Model                   | Description   |
|-------------------------|---|
| <b>DK3210MI-4TP2S-D</b> | Layer 2 Managed industrial PoE switch with 4*10/100/1000Base-T PoE ports and 2*100/1000Base-X SFP slots, supports DI/DO/RS485/Modbus, complies with IEEE802.3af, IEEE802.3at standard, DC44-57V, redundant dual power supply, Din-rail installation. Operation temperature: -40°C~+75°C |