

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

**Layer 2 Lite Managed Industrial Ethernet Switch**

**DK3211MI-8T2S**



## Features

- 8\*10/100/1000Base-T RJ45 ports, 2\*1G/2.5GBase-X SFP(SC/FC/ST optional) ports
- DC 12~58V input, redundant power supply with polarity reverse/over-voltage protection
- Support Layer 2 management function:
  - VLAN/Port Mirroring/IGMP/QoS/LLDP/802.1X/Fiber transceiver DDM
  - /IPV6 management/Web/SNMP/Telnet/TFTP/Web upgrading
- Support G.8032 ERPS protocol, recovery time  $\leq 20\text{ms}$
- Support 4KV 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 DK3211MI-8T2S series are highly reliable managed industrial Ethernet switches with 8-port 10/100/1000-T and 2-port 1G/2.5GBase-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. DK3211MI-8T2S support Web/SNMP/Telnet management, the managed features are such as QoS, VLAN, IGMP, Port mirroring, 802.1X, LLDP, Fiber transceiver DDM, IPV6 management and so on.

DK3211MI-8T2S 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 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.                  | DK3211MI-8T2S  |                                   |
|----------------------------|--|-----------------------------------|
| Interface                  | Fiber ports  | Copper RJ45 ports                 |
|                            | 2  | 8                                 |
| Ethernet                   | 8*10/100/1000Base-T RJ45<br>2*1000/2500Base-X SFP (SC/FC/ST optional)  |                                   |
| Management port            | 1*RJ45 Console   |                                   |
| Standard                   | IEEE 802.3 10Base-T Ethernet<br>IEEE 802.3u 100Base-TX Ethernet<br>IEEE 802.3ab 1000Base-T Ethernet<br>IEEE 802.3z 1000Base-X Ethernet<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 |                                   |
| <b>LED Indicators</b>      |  |                                   |
| 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    |
| 1-8 (Copper ports)         | Green indicators   | Yellow indicators                 |
|                            | Off: ports link down   | Off: port speed 10/100M           |
|                            | Normal on: ports link up   | On: port speed 1000M              |
|                            | Blinking: ports receiving data   |                                   |

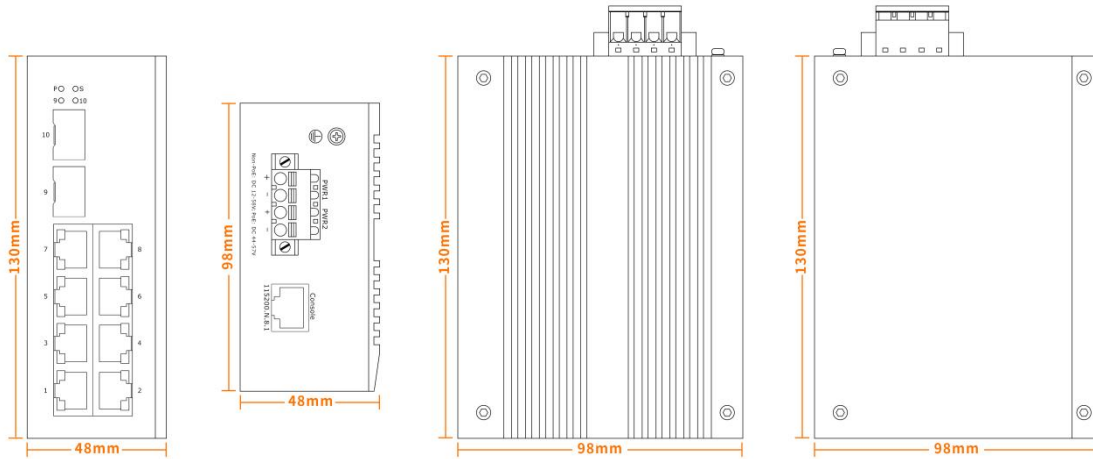
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|-----------------------------|---|
| 9-10 (fiber ports) Green    | Off: ports link down  |
|                             | Normal on: ports link up  |
|                             | Blinking: receiving data  |
| <b>Power parameter</b>      |   |
| Input voltage               | 12-58VDC, redundant power input   |
| Input current               | 1A Max  |
| Total consumption           | Full loading $\leq$ 10 W  |
| Connector                   | Removable 4-pin terminal block  |
| Reverse polarity protection | Support   |
| Over-voltage 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<br>Recovery time $\leq$ 20ms  |
| Multicast                   | IGMP V1,V2,V3<br>IGMP snooping  |
| QoS                         | Ingress Port-based Rate-limit<br>Egress Port-based Rate-limit   |
| Security features           | Support 802.1x, port authentication, MAC authentication, RADIUS service<br>Support port isolation   |
| Management and maintenance  | 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 |

|                                     |  |
|-------------------------------------|--|
|                                     | 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>           |  |
| 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  |
| <b>Mechanical structure</b>         |  |
| Case protection                     | IP40   |
| Installation method                 | Din-rail   |
| Dimension(W*D*H)mm                  | 48*98*130mm  |
| Weight                              | 0.65   |
| <b>Operating environment</b>        |  |
| Operating temperature               | -40℃~+75℃  |
| Storage/transportation temperature) | -40℃~+85℃  |
| Relative humidity                   | Operation humidity: 10%-90%RH<br>Storage humidity: 5%-95%RH  |
| Industrial Standard                 | Surge protection of power: IEC 61000-4-5 Level 3 (4KV/2KV) (8/20us)  |
|                                     | Surge protection of Ethernet ports: IEC 61000-4-5 Level 3 (4KV/2KV) (10/700us)   |
|                                     | DIP: IEC 61000-4-11 Level 3 (10V)  |
|                                     | ESD: IEC 61000-4-2 Level 4 (8K/15K)  |
|                                     | Shock: IEC 60068-2-27  |

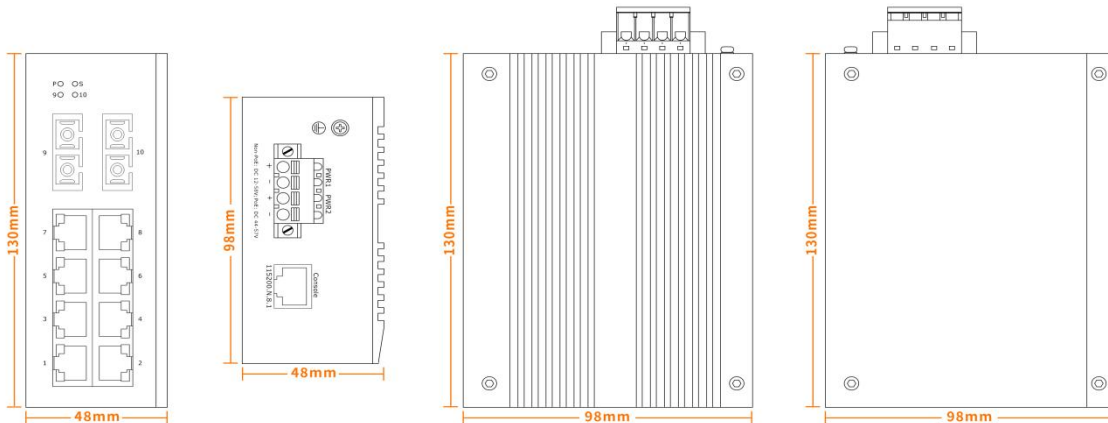
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|                      | Free fall: IEC 60068-2-32 |
|                      | Vibration: IEC 60068-2-6  |
| <b>Certification</b> | CE/FCC/RoHS               |
| <b>Warranty</b>      | 5 years                   |

## Structure diagram

SFP model



SC/FC/ST model



## Order information

| Model                          | Description   |
|--------------------------------|---|
| <p><b>DK3211MI-8T2S</b></p>    | <p>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. Fiber port transmission distance depending on the SFP module; Operation temperature: -40°C~+75°C</p>         |
| <p><b>DK3211MI-8T2S-SC</b></p> | <p>Layer 2 Managed industrial Ethernet switch with 8*10/100/1000Base-T RJ45 ports and 2*1G/2.5GBase-X SC ports, DC12-58V input, redundant dual power supply, Din-rail installation; Multi-mode/Single mode/ dual fiber/single fiber, 550m -100KM optional; Operation temperature: -40°C~+75°C</p> |
| <p><b>DK3211MI-8T2S-FC</b></p> | <p>Layer 2 Managed industrial Ethernet switch with 8*10/100/1000Base-T RJ45 ports and 2*1G/2.5GBase-X FC ports, redundant dual power supply, Din-rail installation; Multi-mode/Single mode/ dual fiber/single fiber, 550m -100KM optional; Operation temperature: -40°C~+75°C</p>                 |
| <p><b>DK3211MI-8T2S-ST</b></p> | <p>Layer 2 Managed industrial Ethernet switch with 8*10/100/1000Base-T RJ45 ports and 2*1G/2.5GBase-X ST ports, redundant dual power supply, Din-rail installation; Multi-mode/Single mode/ dual fiber/single fiber, 550m -100KM optional; Operation temperature: -40°C~+75°C</p>                 |