2891057
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Ethernet switch, 24 Ethernet ports on the front in RJ45 format, automatic detection of 10, 100 or 1000 Mbps data transmission rate, coupling of network segments with different transmission speeds, auto crossing function, installs in 19-in. ( 482 mm ) rack


## Product description

## Ethernet interface

The FL SWITCH 1924 has 24 Ethernet ports in RJ45 format. It is mounted in a 19-in. ( 482 mm ) rack with AC power. The data transmission speed is $10 \mathrm{Mbps}, 100 \mathrm{Mbps}$ or 1000 Mbps . The switch also supports jumbo frames.
Each port has an auto crossing function. It is not necessary to make a distinction between 1:1 or crossover Ethernet cables. Mounting brackets and power cords for EEC (CEE 7/4) and North America (NEMA 5-15) are included. User supplies screws for bracket to rack connection.

Switching properties of FL SWITCH 1924
-Store-and-forward:
All data telegrams that are received by the switch have their validity checked. Invalid or faulty data packets (>9216 bytes or CRC errors) and fragments (<64 bytes) are rejected. Valid data telegrams are forwarded by the switch. The switch always forwards the data using the data transmission speed that is used in the destination network segment.
-Multi-address function:
The switch independently learns the addresses for termination devices, which are connected via a port, by evaluating the source addresses in the data telegrams. Only packets with unknown addresses, with a source address of this port or with a multicast/broadcast address in the destination address field are forwarded via the corresponding port. The switch can store up to 8192 MAC addresses in its address table.
-Quality of service (QoS): IEEE 802.1P/Q
The FL SWITCH 1924 switches are capable of reading Ethernet packets that have already been assigned a priority level by a managed switch. In case of heavy traffic, packets with a priority level between 4 and 7 are considered high priority and processed before packets with a priority level between 0 and 3 (2:1 ratio). After prioritization the packets are forwarded without modification.
-Grounding
The metal RJ45 socket housings are connected to earth/ground. For maximum noise immunity, shielded RJ45 connectors and cables should be used.

## Your advantages

- Quality of service (QoS) support (2 queus)
- Jumbo frame support (frame size up to 9216 bytes/frame)
- Power supply range of 100 V AC ... 240 V AC at $50 / 60 \mathrm{~Hz}$
- MAC address table size is 8192 ( 8 k ) entries
- Two power cords are included. For North America, a NEMA 5-15 3-pin plug (type A). For EEC, a CEE 7/4 (type F)


## Commercial data

| Item number |
| :--- |
| Packing unit |
| Sales key |
| Product key |
| Catalog page |

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| GTIN | 4046356763158 |
| :--- | :--- |
| Weight per piece (including packing) | $3,589.4 \mathrm{~g}$ |
| Weight per piece (excluding packing) | $2,730 \mathrm{~g}$ |
| Customs tariff number | 85176200 |
| Country of origin | TW |

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## Technical data

Dimensions

| Width | 482 mm |
| :--- | :--- |
| Height | 44 mm |
| Depth | 210 mm |

Notes

Utilization restriction
EMC note EMC: class A product, see manufacturer's declaration in the

## Mounting

Mounting type
Rack mount, includes brackets
Interfaces

Ethernet

| Connection method | RJ45 |
| :--- | :--- |
| Transmission speed | $10 / 100 / 1000 \mathrm{Mbps}$ |
| Transmission physics | Twisted pair connection |
| Transmission length | 100 m (per segment) |
| Signal LEDs | Activity, link status |
| No. of channels | 24 (RJ45 ports) |

Product properties

## Product type

Product family
Type
MTTF

## Switch

Unmanaged Switch 1900
Stand-Alone
30.4 Years (MIL-HDBK-217F standard, temperature $25^{\circ} \mathrm{C}$, operating cycle 100\%)

Switch functions
Basic functions

MAC address table
Status and diagnostic indicators
Additional functions

Security functions
Basic functions

Unmanaged switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode

8192
LEDs: $U_{S}$, link and activity per port
Autonegotiation

Unmanaged switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode

Electrical properties
Local diagnostics
Maximum power dissipation for nominal condition

US Power present Green LED
Maximum power dissipation for nominal condition

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| Transmission medium | Copper |
| :--- | :--- |
| Supply |  |
| Supply voltage (AC) | 120 V AC |
| Supply voltage range | 220 V AC |
| Inrush current | $100 \mathrm{~V} \mathrm{AC} \ldots 240 \mathrm{~V} \mathrm{AC} \mathrm{(50/60} \mathrm{Hz)}$ |
| Max. current consumption | $23 \mathrm{~A} \mathrm{(200} \mathrm{\mu s} \mathrm{@} \mathrm{230} \mathrm{V} \mathrm{AC)}$ |
| Typical current consumption | $0.4 \mathrm{~A}(\mathrm{maximum})$ |
| Supply: Module electronics | $312 \mathrm{~mA}(100 \mathrm{~V} \mathrm{AC})$ |
| Supply voltage range | $100 \mathrm{~V} \mathrm{AC} \ldots 240 \mathrm{~V} \mathrm{AC}$ |
| Current consumption | $1 \mathrm{~A} \mathrm{(maximum)}$ |

Environmental and real-life conditions

| Ambient conditions |  |
| :--- | :--- |
| Degree of protection | $0^{\circ} \mathrm{C} \ldots 60^{\circ} \mathrm{C}$ |
| Ambient temperature (operation) | $-25^{\circ} \mathrm{C} \ldots 70^{\circ} \mathrm{C}$ |
| Ambient temperature (storage/transport) | $5 \% \ldots 95 \%$ (non-condensing) |
| Permissible humidity (operation) | $86 \mathrm{kPa} \ldots 108 \mathrm{kPa}$ (2000 m above sea level) |
| Air pressure (operation) |  |
| EMC data | IEC 61000-6-2 EN 61000-4-2 (ESD) Criterion B |
| Conformance with EMC directives | EN 61000-4-3 (radiated noise immunity) Criterion A |
|  | EN 61000-4-4 (EFT burst) Criterion B |
| EN 61000-4-5 (surge) Criterion B |  |
| Noise immunity | EN 61000-4-6 (line noise immunity) Criterion A |
| Electromagnetic compatibility | EN 61000-4-8 (electromagnetic fields) Criterion A |
| Noise emission | EN 61000-4-11 |
|  | EN 61000-6-3 |
|  | EN 61000-6-2:2005 |
|  | Conformance with EMC directive 2004/108/EC and for low- |

System properties

## Functionality

Basic functions
Unmanaged switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode

## Signaling

Status display
LEDs: $U_{S}$, link and activity per port

# FL SWITCH 1924 - Industrial Ethernet Switch 

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