

## Industrial Ethernet Switch - FL SWITCH 2204-2TC-2SFX - 2702334

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Managed Switch 2000, 4 RJ45 ports 10/100 Mbps, 2 SFP module 100 Mbps, 2 Combo ports 100 Mbps, Degree of protection IP20

### Why buy this product

- ✓ Unmanaged Mode
- ✓ Configuration memory
- ✓ RSTP
- ✓ DHCP client, DHCP server (pool-based and port-based), DHCP option 82
- ✓ VLANs
- ✓ MRP (client and master)
- ✓ Web-based management, SNMP
- ✓ Slim design
- ✓ -40°C ... +70°C ambient temperature



**Ethernet**

### Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 1                                                                                                       |
| GTIN         | <br>4 055626 129006 |
| GTIN         | 4055626129006                                                                                           |

### Technical data

#### Note

|                         |                                                                           |
|-------------------------|---------------------------------------------------------------------------|
| Utilization restriction | EMC: class A product, see manufacturer's declaration in the download area |
|-------------------------|---------------------------------------------------------------------------|

#### Dimensions

|       |       |
|-------|-------|
| Width | 45 mm |
|-------|-------|

# Industrial Ethernet Switch - FL SWITCH 2204-2TC-2SFX - 2702334

## Technical data

### Dimensions

|        |        |
|--------|--------|
| Height | 130 mm |
| Depth  | 115 mm |

### Ambient conditions

|                                          |                                             |
|------------------------------------------|---------------------------------------------|
| Degree of protection                     | IP20                                        |
| Ambient temperature (operation)          | -40 °C ... 70 °C                            |
| Ambient temperature (storage/transport)  | -40 °C ... 85 °C                            |
| Permissible humidity (operation)         | 10 % ... 95 % (non-condensing)              |
| Permissible humidity (storage/transport) | 10 % ... 95 % (non-condensing)              |
| Air pressure (operation)                 | 68 kPa ... 108 kPa (3000 m above sea level) |
| Air pressure (storage/transport)         | 68 kPa ... 108 kPa (3000 m above sea level) |

### Interfaces

|                           |                                                      |
|---------------------------|------------------------------------------------------|
| Interface 1               | Ethernet (RJ45)                                      |
| No. of ports              | 4 (RJ45 ports)                                       |
| Connection method         | RJ45                                                 |
| Note on connection method | Auto negotiation and autocrossing                    |
| Transmission physics      | Copper                                               |
| Transmission speed        | 10/100 Mbps                                          |
| Transmission length       | 100 m (per segment)                                  |
| Signal LEDs               | Data receive, link status                            |
| Interface 2               | SFP module                                           |
| No. of ports              | 2 (SFP module)                                       |
| Connection method         | SFP ports                                            |
| Transmission physics      | Depending on the SFP module                          |
| Transmission speed        | 100 Mbps (full duplex)                               |
| Transmission length       | up to 40 km (Depending on the fiber/SFP module used) |
| Signal LEDs               | Data receive, link status                            |
| Interface 3               | Ethernet (combo)                                     |
| No. of ports              | 2 (Combo ports)                                      |
| Connection method         | SFP or RJ45 ports                                    |
| Note on connection method | Auto negotiation and autocrossing                    |
| Transmission physics      | Depending on the SFP module                          |
| Transmission speed        | 100 Mbps (full duplex)                               |
| Transmission length       | up to 40 km (Depending on the fiber/SFP module used) |
| Signal LEDs               | Data receive, link status                            |

### Function

|                 |                                                    |
|-----------------|----------------------------------------------------|
| Basic functions | Store-and-forward switch, complies with IEEE 802.3 |
|-----------------|----------------------------------------------------|

# Industrial Ethernet Switch - FL SWITCH 2204-2TC-2SFX - 2702334

## Technical data

### Function

|                                  |                                                                                                         |
|----------------------------------|---------------------------------------------------------------------------------------------------------|
| Management                       | Web-based management (HTTP/HTTPS)                                                                       |
|                                  | SNMPv1/v2/v3                                                                                            |
|                                  | Command-line interface (Telnet, SSH)                                                                    |
| Diagnostic functions             | RMON History                                                                                            |
|                                  | LLDP (Link Layer Discovery Protocol)                                                                    |
|                                  | SNMP-Traps                                                                                              |
|                                  | ACD (Address Conflict Detection)                                                                        |
|                                  | N:1-Portmirroring                                                                                       |
| Filter functions                 | Quality of Service (4 priority classes)                                                                 |
|                                  | Port-Priorisierung                                                                                      |
|                                  | VLAN (up to 32 VLANs)                                                                                   |
|                                  | IGMP Snooping (32 groups)                                                                               |
|                                  | IGMP Query                                                                                              |
|                                  | Auto-Query-Port                                                                                         |
|                                  | Extended Multicast Filtering                                                                            |
| MAC address table                | 8k                                                                                                      |
| Redundancy                       | MRP (Media Redundancy Protocol)                                                                         |
|                                  | RSTP (Rapid Spanning Tree Protocol)                                                                     |
|                                  | FRD (Fast Ring Detection)                                                                               |
|                                  | Large Tree Support                                                                                      |
| IP parameterization              | DHCP-Client                                                                                             |
|                                  | DHCP Option 82 (Relay Agent)                                                                            |
|                                  | DHCP server (pool-based, port-based)                                                                    |
|                                  | BootP                                                                                                   |
| PROFINET IO conformance class    | Conformance-Class A                                                                                     |
| Status and diagnostic indicators | LEDs: US1, US2 (power supply), Fail (alarm contact), 2 LEDs per Ethernet port (Link/Activity and Speed) |
| Signal contact control voltage   | 24 V DC (typical)                                                                                       |
| Signal contact control current   | 200 mA (1 minute, maximum)                                                                              |

### Network expansion parameters

|                                         |                                          |
|-----------------------------------------|------------------------------------------|
| Cascading depth                         | Network, linear, and star structure: any |
| Maximum conductor length (twisted pair) | 100 m                                    |

### Supply voltage

|                             |                                                          |
|-----------------------------|----------------------------------------------------------|
| Supply voltage              | 24 V DC (redundant)                                      |
| Residual ripple             | 3.6 V <sub>PP</sub> (within the permitted voltage range) |
| Supply voltage range        | 12 V DC ... 57 V DC                                      |
| Typical current consumption | 250 mA (at U <sub>S</sub> = 24 V DC)                     |

# Industrial Ethernet Switch - FL SWITCH 2204-2TC-2SFX - 2702334

## Technical data

### Supply voltage

|                     |        |
|---------------------|--------|
| Current consumption | 250 mA |
|---------------------|--------|

### General

|                  |                                |
|------------------|--------------------------------|
| Mounting type    | DIN rail                       |
| Type AX          | Book type                      |
| Net weight       | 333.333 g                      |
| Housing material | Polycarbonate fiber reinforced |

### Connection data

|                                       |                      |
|---------------------------------------|----------------------|
| Connection method                     | Screw connection     |
| Conductor cross section solid min.    | 0.14 mm <sup>2</sup> |
| Conductor cross section solid max.    | 1.5 mm <sup>2</sup>  |
| Conductor cross section flexible min. | 0.14 mm <sup>2</sup> |
| Conductor cross section flexible max. | 1.5 mm <sup>2</sup>  |
| Conductor cross section AWG min.      | 26                   |
| Conductor cross section AWG max.      | 16                   |
| Stripping length                      | 9 mm                 |

### Standards and Regulations

|                                                                   |                                                    |
|-------------------------------------------------------------------|----------------------------------------------------|
| Electromagnetic compatibility                                     | Conformance with EMC Directive 2014/30/EU          |
| Developed in acc. with standard                                   | IEC 61000-6.2                                      |
| Test standard                                                     | IEC 61000-4-2 (ESD)                                |
| Test result                                                       | Criterion B                                        |
| Test standard                                                     | EN 61000-4-3 (electromagnetic fields)              |
| Test result                                                       | Criterion A                                        |
| Test standard                                                     | IEC 61000-4-4 (burst)                              |
| Test result                                                       | Criterion A                                        |
| Test standard                                                     | IEC 61000-4-5 (surge)                              |
| Test result                                                       | Criterion A                                        |
| Test standard                                                     | IEC 61000-4-6 (immunity to conducted interference) |
| Test result                                                       | Criterion A                                        |
| Noise emission                                                    | EN 61000-6-4                                       |
| Noise immunity                                                    | EN 61000-6-2                                       |
| Vibration (storage/transport)                                     | 5g, 150 Hz, in acc. with IEC 60068-2-6             |
| Free from substances that could impair the application of coating | Yes                                                |
| Vibration (operation)                                             | In acc. with IEC 60068-2-6: 5g, 150 Hz             |
| ATEX                                                              | # II 3G Ex nA IIC T4 Gc                            |
| IECEX                                                             | Ex nA IIC T4 Gc                                    |

# Industrial Ethernet Switch - FL SWITCH 2204-2TC-2SFX - 2702334

## Technical data

### Environmental Product Compliance

|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
| China RoHS | Environmentally Friendly Use Period = 50                                                            |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

## Classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27250501 |
| eCl@ss 4.1 | 27250501 |
| eCl@ss 5.0 | 27250501 |
| eCl@ss 5.1 | 27250501 |
| eCl@ss 6.0 | 27250501 |
| eCl@ss 7.0 | 27250501 |
| eCl@ss 8.0 | 19170106 |
| eCl@ss 9.0 | 19170106 |

### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC000734 |
| ETIM 4.0 | EC000734 |
| ETIM 5.0 | EC000734 |

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 43172015 |
| UNSPSC 7.0901 | 43201404 |
| UNSPSC 11     | 43172015 |
| UNSPSC 12.01  | 43201410 |
| UNSPSC 13.2   | 43222612 |

## Approvals

### Approvals

---

#### Approvals

ABS / EAC / UL Listed / cUL Listed / cULus Listed

---

#### Ex Approvals

IECEX / ATEX / UL Listed / cUL Listed / cULus Listed

---

# Industrial Ethernet Switch - FL SWITCH 2204-2TC-2SFX - 2702334

## Approvals

### Approval details

|              |                                                                                    |                                                                                                                                                       |                         |
|--------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| ABS          |                                                                                    | <a href="http://www.eagle.org/eagleExternalPortalWEB/">http://www.eagle.org/eagleExternalPortalWEB/</a>                                               | 17-HG1592765-PDA        |
| EAC          |   |                                                                                                                                                       | RU C-<br>DE.A*30.B00767 |
| UL Listed    |   | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 238705           |
| cUL Listed   |   | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 238705           |
| cULus Listed |  |                                                                                                                                                       |                         |

## Accessories

### Accessories

#### Assembly adapter

Adapter - FL DIN RA - 2891053



The FL DIN RA is installed in a standard, 19-inch rack (EIA-310-D, IEC 60297-3-100) to allow DIN rail mounted equipment to be rack mounted.

## Drivers and interfaces

Software - FL SNMP OPC AGENT V3 - 2701136



SNMP-OPC agent, German and English, for integrating OPC-based automation solutions in company-wide network management systems

# Industrial Ethernet Switch - FL SWITCH 2204-2TC-2SFX - 2702334

## Accessories

Software - FL SNMP OPC SERVER V3 - 2701139



SNMP-OPC server, German and English, for monitoring and configuration of SNMP-capable equipment in HMI and SCADA systems

---

## End block

End clamp - E/NS 35 N - 0800886



End clamp, width: 9.5 mm, color: gray

---

## Network management software

Software - FL VIEW 32 LITE - 2701744



FL VIEW, SNMP-based software in English, for the detection and display of Ethernet networks. 32 nodes (network devices) can be monitored in one Class C subnetwork with this version.

---

## Parameterization memory

Memory - SD FLASH 512MB - 2988146



Program and configuration memory, plug-in, 512 Mbyte.

# Industrial Ethernet Switch - FL SWITCH 2204-2TC-2SFX - 2702334

## Accessories

Program / configuration memory - SD FLASH 2GB - 2988162



Program and configuration memory

---

## Protective cap

Dust protection - FL RJ45 PROTECT CAP - 2832991



Dust protection caps for RJ45 socket

---

## SFP module

Media module - FL SFP FX - 2891081



The small form-factor plug-in module provides a fiber optic interface with a data transmission speed of 100 Mbps with a wavelength of 1310 nm (long).

---

Media module - FL SFP FX SM - 2891082



The small form-factor plug-in module provides a fiber optic interface with a data transmission speed of 100 Mbps with a wavelength of 1310 nm (long).

---

Media module - FL SFP FE WDM20-SET - 2702439



Fast Ethernet SFP WDM set for transmission up to a maximum of 20 km on a single fiber with a wavelength of 1310/1550 nm.



## Industrial Ethernet Switch - FL SWITCH 2204-2TC-2SFX - 2702334

### Accessories

---

#### Software - IPASSIGN - 2701094



IPAssign is an easy to use tool for setting the IP address of devices which rely on BOOTP. No installation or administrative rights are required to use IPAssign.

This product is free and only available from the "Downloads" tab.

---

#### Printed-circuit board connector - FK-MCP 1,5/ 5-ST-3,81 GY - 1884005

Plug component, Nominal current: 8 A, Rated voltage (III/2): 160 V, Number of positions: 5, Pitch: 3.81 mm, Connection method: Push-in spring connection, Color: gray, Contact surface: Tin

---

---