



# Easy and future-proof implementation of seamless communication solutions

Economic reasons are leading to Ethernet being implemented more and more often as a uniform communication system for the exchange of data between the factory and the management level. In order to ensure smooth operation of the production plants, it is necessary to have industrial-grade devices. It is for this reason, that Phoenix Contact has put its many years of experience in fieldbus communication and in machine and plant engineering to use and has developed the Factory Line Industrial Ethernet products, a complete portfolio of matching hardware and software components on the basis of Ethernet. The products are both simple to install and handle and adapt flexibly to the requirements of the particular application. A gateway connects existing INTERBUS systems, thus allowing the seamless horizontal and vertical flow of information. A comprehensive service package tailored to the individual requirements of the user rounds off the range. Find out for yourself!



## Simple to install

With our new Power over Ethernet modules FL IF 2PSE-F and FL PSE 2TX, the supply voltage and data can be transmitted together via an Ethernet cable. With this, termination devices, such as WLAN and Bluetooth access points, as well as IP telephony and cameras, can be easily integrated in the Ethernet network. Further, when installing in difficult-to-reach places, such as walls or ceilings, the separate supply connection can be omitted. This saves time and money. Even the fault tolerance of the termination devices can be increased by using a central uninterrupted power supply (UPS).



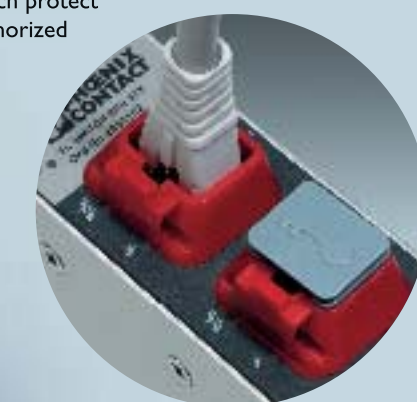
## Simply powerful

The manageable switches from Phoenix Contact are not only characterized by 2.4 Gbit full wire speed backplanes. The Managed Modular Switch (MMS) and the Managed Compact Switch (MCS) also provide extensive software features, which allow your automation solution to be optimized. Based on the extensive integration of Profinet in the Factory Line product family, MMS and MCS, for example, can be completely configured as Profinet devices. The optimized redundancy mechanism of the firmware Version 4.0 allows to switch to the redundant Ethernet and Profinet networks in the event of an error without interference. This allows you to further increase the availability of your Profinet network.



## Simply versatile

The demands on modern automation systems are varied. For this reason, we have extended the proven SF switch family by additional infrastructure components. With the new SFN switches, networks can be quickly and inexpensively extended up to the field level. Thanks to its narrow housing design, the variable port number and versatile connection method, as well as the high performance up to 1000 mbps on all ports, the SFN switches implement all automation tasks economically. To increase the network security, they can be equipped with layer 1 security elements which protect against unauthorized access.



## Standard switches



- FL SWITCH SFN 5TX**  
Order No.: 2891152
  - 5 TP-RJ45 ports 10/100 mbps (autonegotiation)
  - Autocrossing
  - 30 mm wide housing
  - Lockable ports (accessory)
- FL SWITCH SFN 8TX**  
Order No.: 2891929
  - 8 TP-RJ45 ports 10/100 mbps (autonegotiation)
  - Autocrossing
  - 53 mm wide housing
  - Lockable ports (accessory)
- FL SWITCH SFN 8GT**  
Order No.: 2891673
  - 8 TP-RJ45 ports 10/100/1000 mbps (gigabit)
  - Autonegotiation, autocrossing
  - 53 mm wide housing
  - Lockable ports (accessory)

- FL SWITCH SFN 4TX/FX**  
Order No.: 2891851
  - 4 TP-RJ45 ports 10/100 mbps (autonegotiation)
  - 1 port 100BASE-FX multimode glass fiber (SC-D)
  - Autocrossing
  - 30 mm wide housing
  - Lockable ports (accessory)
- FL SWITCH SFN 7TX/FX**  
Order No.: 2891097
  - 7 TP-RJ45 ports 10/100 mbps (autonegotiation)
  - 1 port 100BASE-FX multimode glass fiber (SC-D)
  - Autocrossing
  - 53 mm wide housing
  - Lockable ports (accessory)
- FL SWITCH SFN 7GT/SX**  
Order No.: 2891518
  - 7 TP-RJ45 ports 10/100/1000 mbps (gigabit)
  - 1 port 100BASE-SX multimode glass fiber (SC-D)
  - Autonegotiation, autocrossing
  - 53 mm wide housing
  - Lockable ports (accessory)

- FL SWITCH SFN 4TX/FX ST**  
Order No.: 2891453
  - 4 TP-RJ45 ports 10/100 mbps (autonegotiation)
  - 1 port 100BASE-FX multimode glass fiber (ST or BFOC)
  - Autocrossing
  - 30 mm wide housing
  - Lockable ports (accessory)
- FL SWITCH SFN 7TX/FX ST**  
Order No.: 2891110
  - 7 TP-RJ45 ports 10/100 mbps (autonegotiation)
  - 1 port 100BASE-FX multimode glass fiber (ST or BFOC)
  - Autocrossing
  - 53 mm wide housing
  - Lockable ports (accessory)
- FL SWITCH SFN 6GT/2SX**  
Order No.: 2891398
  - 6 TP-RJ45 ports 10/100/1000 mbps (gigabit)
  - 2 ports 100BASE-SX multimode glass fiber (SC-D)
  - Autonegotiation, autocrossing
  - 53 mm wide housing
  - Lockable ports (accessory)

- FL SWITCH SFN 6TX/2FX**  
Order No.: 2891314
  - 6 TP-RJ45 ports 10/100 mbps (autonegotiation)
  - 2 ports 100BASE-FX multimode glass fiber (SC-D)
  - Autocrossing
  - 53 mm wide housing
  - Lockable ports (accessory)
- FL SWITCH SFN 6GT/2LX**  
Order No.: 2891987
  - 6 TP-RJ45 ports 10/100/1000 mbps (gigabit)
  - 2 ports 100BASE-LX single-mode glass fiber (SC-D)
  - Autonegotiation, autocrossing
  - 53 mm wide housing
  - Lockable ports (accessory)

- FL SWITCH SFN 6TX/2FX ST**  
Order No.: 2891411
  - 6 TP-RJ45 ports 10/100 mbps (autonegotiation)
  - 2 ports 100BASE-FX multimode glass fiber (ST or BFOC)
  - Autocrossing
  - 53 mm wide housing
  - Lockable ports (accessory)
- FL SWITCH SFN 6GT/2LX-20**  
Order No.: 2891563
  - 6 TP-RJ45 ports 10/100/1000 mbps (gigabit)
  - 2 ports 100BASE-LX single-mode glass fiber (long haul)
  - Autonegotiation, autocrossing
  - 53 mm wide housing
  - Lockable ports (accessory)

## Standard switches

- FL SWITCH SF 8TX**  
Order No.: 2832771
  - 8 TP-RJ45 ports 10/100 mbps (autonegotiation)
  - Autocrossing
  - Floating alarm contact
  - Redundant 24 V DC supply
- FL SWITCH SF 7TX/FX ST**  
Order No.: 2832577
  - 7 TP-RJ45 ports 10/100 mbps (autonegotiation)
  - 1 port 100BASE-FX multimode glass fiber (ST or BFOC)
  - Autocrossing
  - Floating alarm contact
  - Redundant 24 V DC supply
- FL SWITCH SF 16TX**  
Order No.: 2832849
  - 16 TP-RJ45 ports 10/100 mbps (autonegotiation)
  - Autocrossing
  - Floating alarm contact
  - Redundant 24 V DC supply

- FL SWITCH SF 7TX/FX**  
Order No.: 2832726
  - 7 TP-RJ45 ports 10/100 mbps (autonegotiation)
  - 1 port 100BASE-FX multimode glass fiber (SC-D)
  - Autocrossing
  - Floating alarm contact
  - Redundant 24 V DC supply
- FL SWITCH SF 6TX/2FX ST**  
Order No.: 2832674
  - 6 TP-RJ45 ports 10/100 mbps (autonegotiation)
  - 2 ports 100BASE-FX multimode glass fiber (ST or BFOC)
  - Autocrossing
  - Floating alarm contact
  - Redundant 24 V DC supply
- FL SWITCH SF 15TX/FX**  
Order No.: 2832661
  - 15 TP-RJ45 ports 10/100 mbps (autonegotiation)
  - 1 port 100BASE-FX multimode glass fiber (SC-D)
  - Autocrossing
  - Floating alarm contact
  - Redundant 24 V DC supply

- FL SWITCH SF 6TX/2FX**  
Order No.: 2832933
  - 6 TP-RJ45 ports 10/100 mbps (autonegotiation)
  - 2 ports 100BASE-FX multimode glass fiber (SC-D)
  - Autocrossing
  - Floating alarm contact
  - Redundant 24 V DC supply
- FL SWITCH SF 4TX/3FX ST**  
Order No.: 2832603
  - 4 TP-RJ45 ports 10/100 mbps (autonegotiation)
  - 3 ports 100BASE-FX multimode glass fiber (ST or BFOC)
  - Autocrossing
  - Floating alarm contact
  - Redundant 24 V DC supply
- FL SWITCH SF 14TX/2FX**  
Order No.: 2832593
  - 14 TP-RJ45 ports 10/100 mbps (autonegotiation)
  - 2 ports 100BASE-FX multimode glass fiber (SC-D)
  - Autocrossing
  - Floating alarm contact
  - Redundant 24 V DC supply

## Media converters

- FL MC 10/100BASE-T/FO 660**  
Order No.: 2708193
  - Converter for converting 10/100BASE-T to polymer/HCS fiber (660 nm)
  - SC-RJ-FO connection
  - Range with polymer fibers: 70 m
  - Range with HCS fibers: 300 m at 10 mbps or 100 m at 100 mbps
- FL CB IF**  
Order No.: 2832470
  - Converter board for interface modules FL IF TX/POF ... to convert to polymer fibers

- FL MC 10/100BASE-T/FO G1300 ST**  
Order No.: 2708986
  - Converter for converting from 10/100BASE-T(X) to multimode glass fibers (1,300 nm) according to the FX standard
  - BFOC (ST®)-FO connection
  - Range: max. 10,000 m
  - Transparent autonegotiation, LINK through
- FL MC 10/100BASE-T/FO G1300 SM**  
Order No.: 2708177
  - Converter for converting from 10/100BASE-T(X) to single-mode glass fibers (1,300 nm) according to the FX standard
  - SC-Duplex FO connection
  - Range: max. 36,000 m
  - Transparent autonegotiation, LINK through

- FL COM SERVER RS232**  
Order No.: 2744490
  - RS-232 or RS-485 conversion to Ethernet
  - Client and server
  - Com port redirector software
  - Modbus TCP, RTU and ASCII to master and slaves
  - PPP routing
  - LAN modem
- FL COM SERVER RS485**  
Order No.: 2708740
  - RS-232 or RS-485 conversion to Ethernet
  - Client and server
  - Com port redirector software
  - Modbus TCP, RTU and ASCII to master and slaves
  - PPP routing
  - LAN modem

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