



### Features

- ✓ 12-Ports Ethernet RJ45 with 10/100/1000 Mbit/s
- ✓ 4-Ports for SFP-Transceivers with 1000 MBit/s, Single-mode or Multi-mode
- ✓ Practical design for optimized cable routes
- ✓ PROFINET Conformance Class B (100 Mbps)
- ✓ Integration into the automation network with GSDML file
- ✓ Fast and easy configuration and diagnostics via PROFINET and web interface
- ✓ LLDP, DCP, diagnostic alarms
- ✓ Media redundancy: MRP client
- ✓ SNMP, VLAN, Cos/QoS mapping, NTP, port mirroring
- ✓ Network statistics (frames, errors)
- ✓ SD memory card for configuration
- ✓ Redundant power supply

## PROFINET-Switch FLEXtra

### 12x RJ45 / 4x SFP, managed, 1GBit

The FLEXtra PROFINET-Switch connects the control world with PROFINET according to Conformance Class B and the IT world with up to 1GBit Ethernet.

The managed FLEXtra PROFINET switch FO can be used to network PROFINET components with 100 Mbps as well as Ethernet nodes with up to 1000 Mbps. The FLEXtra PROFINET switch FO has 12 RJ45 ports with up to 1000Mbit/s and 4 SFP ports for fiber transmission with 1000 Mbit/s.

Thus, communication from the control level and the machine or the mixing of Ethernet and PROFINET components in one switch is possible. PROFINET prioritization according to Conformance Class B of the machine components is always guaranteed. In addition to PROFINET, functions such as SNMP, NTP, VLAN, port mirroring, QoS/CoS mapping and extensive statistics are available for managing the Ethernet network. If required, the configuration can be saved on an SD card or loaded for commissioning.

The practical design with the intelligent arrangement of the Ethernet sockets saves space in the control cabinet. The status LEDs on the top of the FLEXtra PROFINET switch, which are always clearly visible, allow for easy diagnostics even when fully wired. One of the most important functions of a PROFINET switch is the prioritization of PROFINET telegram traffic in the machine network. The managed switch can distinguish whether the telegram is a web request, an FTP file transfer, a media stream, or a PROFINET telegram. In the event of a high transmission load, the important telegrams can thus be prioritized to prevent telegram losses of the machine components. The supported PROFINET protocols, such as LLDP, DCP or diagnostic alarms, can be easily parameterized and managed.

#### Technical advantages when using a PROFINET-Switch:

- Prioritizing of PROFINET frames

- Assignment of a configuration via the device name
- Neighborhood detection
- Device exchange without programming device
- Ring redundancy
- Each port can be activated or deactivated
- Diagnostic messages for network problems
- Identification and maintenance data

In addition, the FLEXtra PROFINET switch supports port control via inputs and port status indication via outputs. Bits in the PROFINET-IO image of the switch can be used as inputs and outputs as well as 4 digital inputs and 2 digital outputs with 24V. The assignment and the function of the inputs and outputs can be configured via the GSDML file.

## General information

Order number	700-856-12F41
Article name	FLEXtra PROFINET-Switch FO, 16-Port, managed, 10/100/1000 Mbps
Scope of delivery	FLEXtra PROFINET-Switch FO, 16-Port with power supply plug
Dimensions (DxWxH)	78 x 125 x 111 mm
Weight	Approx. 550 g

## PROFINET/Ethernet interface (X1)

Connection	12 x RJ45 4 x Fiber Optic (FO) for SFP Transceiver modules, single mode or Multimode integrated Switch
Transmission rate	RJ45: 10/100/1000 Mbps SFP: 1000 Mbps
Protocol	PROFINET IO Device as defined in IEC 61158-6-10
Features	PROFINET Conformance Class B (in Preparation), Media Redundancy (MRP), automatic addressing (DCP), topology detection (LLDP), diagnostic alarms, VLAN, SNMP V2, Port-Mirroring, Port statistics

## I/O

Inputs	4, type 3 acc. DIN EN 61131-2
Outputs	2, 500mA 24V DC, electronic fused

## Status indication

Function status	4 LEDs
Ethernet status	16 LEDs (two-colored)

## Power supply

Voltage supply	2x DC 24 V, 18 – 30 V DC, redundant
Current draw	max. 400 mA with DC 24 V
Power dissipation	Max. 9,6 W

## Ambient conditions

Ambient temperature	-40 °C ... +75 °C
Transport and storage temperature	-40 °C ... +85 °C
Relative air humidity	95 % r H without condensation
Pollution degree	2
Protection rating	IP20
Mounting position	Any
Approvals	CE