



Ethernet Switch

Ha-VIS FTS 3100-A

10-port Ethernet Switch with Fast Track Switching Technology managed

Advantages

- Identification, acceleration and preference for automation frames
- Deterministic data transfer for selected profiles
- Managed Ethernet Switch acc. to IEEE 802.3
- Fast Track Switching Mode, Store and Forward Switching mode
- Robust metal housing, RoHS compliant

General Description

The Fast Ethernet Switches of the product family Ha-VIS FTS 3000 can identify automation profiles (e.g. PROFINET, EtherNet/IP, Modbus TCP and customized profiles), accelerate their data transmission and prefer them. They are suitable for industrial applications. The Ha-VIS FTS 3100-A enables the connection of up to 10 network devices over shielded Twisted Pair. It supports Ethernet (10 Mbit/s) and Fast Ethernet (100 Mbit/s). The Ethernet Switch works as a managed switch and can work in Fast Track Switching Mode and in Store and Forward mode. It supports Auto-crossing, Auto-negotiation and Auto-polarity.

Identification	Part number	Drawing	Dimensions in mm
<p>Ha-VIS FTS 3100-A</p> <p>Ethernet Switch with 10 ports RJ45</p> <p>for top-hat mounting rail</p>	20 78 110 4000		

All data represent the current state of development at the time of print and are therefore non-binding.

HARTING reserves the right to modify designs without prior notice.

Technical characteristics

Features

- Auto-crossing
- Auto-negotiation
- Auto-polarity
- Store and Forward Switching mode
- Fast Track Switching mode

Ethernet Interface

Number of ports

Cable types acc. to IEEE 802.3

Data rate

Maximum cable length

Terminating method

Diagnostics (via LED)

- 10x 10/100Base-TX, managed
 - Shielded Twisted Pair (STP) or Unshielded Twisted Pair (UTP), Category 5
 - 10/100 Mbit/s (RJ45)
 - 100 m (Twisted Pair; with cable Category 5 acc. to EN 50 173-1)
 - RJ45 (Twisted Pair)
 - Status Link: Green
 - Status Data transfer (Act): Green flashing
 - Data transfer rate (Speed): 100 Mbit/s: Yellow / 10 Mbit/s: OFF
- Line, Ring, Star or mixed

Topology

Basic functions

Port settings

- 10/100 Mbit/s
- Full/Half Duplex
- Port enable/disable
- Port mirroring
- Flow Control
- Industrial Profile (PROFINET, EtherNet/IP, Modbus TCP, customized)
- NRT Bandwidth Control

Management functions

- STP, RSTP
- IGMP Snooping with support for querier
- Port Based VLANs
- Alarm via email, SNMP traps
- PROFINET diagnosis
- DHCP Option 82
- Pluggable Memory Card

Power Supply

Nominal input voltage range

Permissible range

Current consumption

Diagnostics (via LED)

12 V ... 48 V DC

9.6 V ... 60 V

300 mA (at 24 V DC)

- Power supply in permissible range: Green
- Undervoltage: Red

Terminating Power supply

5-pole pluggable screw contact, for redundant power supply

Design features

Material of housing

Dimensions (W x H x D)

Degree of protection

acc. to DIN 60 529

Mounting

Aluminium, anodized

44 x 130 x 100 mm (without connectors)

IP 30

- 35 mm top-hat rail acc. to EN 60 715
- Panel mounting, vertical assembly

Weight

approx. 0.5 kg

Environmental conditions

Operating temperature

Storage temperature

Relative humidity

0 °C ... +55 °C

-40 °C ... +85 °C

30 % ... 95 % (non-condensing)