

**Ethernet Switch**  
**Ha-VIS mCon 3000**  
 Ethernet Switches, managed,  
 for mounting onto top-hat mounting rail  
 in control cabinets



## General Description

The fully managed Ethernet Switches of the product family Ha-VIS mCon 3000 enable the connection of up to 10 network devices (according to type) over Twisted Pair cables and fibre-optic cables (Multi- and Singlemode). The Ha-VIS mCon 3000 Ethernet Switch family, with its integrated LEDs on each port, supports fast and easy network diagnosis.

The Ha-VIS mCon 3000 Ethernet Switches are designed for an effective, industrial and individual use. They support both SNMP and an easy Web interface for management functions.

## Features

- Ethernet Switch acc. to IEEE 802.3
- Store and Forward Switching Mode
- up to 10 ports, managed, non-blocking
- Auto-crossing, Auto-negotiation, Auto-polarity
- Temperature range –40 °C ... +70 °C

## Advantages

- Metal housing
- EMC, temperature range and mechanical stability meet the highest demands
- Integrated management functions

## Application fields

- Industrial automation
- Automotive industry
- Wind power
- Power distribution systems

## Technical characteristics

### Ethernet interface RJ45

Number of ports	6x / 8x / 10x 10/100Base-T(X), 2x 10/100/1000Base-T(X)
Cable types according to IEEE 802.3	Shielded Twisted Pair (STP) or Unshielded Twisted Pair (UTP), Category 5
Data rate	10 Mbit/s, 100 Mbit/s or 1000 Mbit/s (RJ45)
Maximum cable length	100 m (Twisted Pair; with Category 5 cable acc. to DIN EN 50 173-1)
Termination	RJ45 (Twisted Pair)
Diagnostics (via LED)	<ul style="list-style-type: none"> <li>• Status Link – Green</li> <li>• Data transfer (Act) – Green flashing</li> <li>• Data transfer rate (Speed) – 1000 Mbit/s: Green 100 Mbit/s: Yellow 10 Mbit/s: OFF</li> </ul>
Topology	Ring, Line, Star or mixed

### Power supply

Input voltage	24 V DC
Termination	5-pole screw terminal, pluggable for redundant power supply
Diagnostics (via LED)	Power supply

### Alarm signalling contact

Change-over contact, potential-free, 24 V DC / 0.5 A  
3-pole pluggable screw contact

### Design features

Housing material	Metal (powder coated)
Dimensions (W x H x D)	60 x 132 x 104 mm (incl. cap, without connectors)
Degree of protection acc. to DIN 60529	IP 30
Ha-VIS mCon xxxx-AE	IP 20
Mounting	<ul style="list-style-type: none"> <li>• 35 mm top-hat rail acc. to EN 60715</li> <li>• Panel mounting, vertical assembly</li> </ul>
Weight	approx. 0.6 kg

### Environmental conditions

Operating temperature	–40 °C ... +70 °C
Storage temperature	–40 °C ... +85 °C
Relative humidity	10 % ... 95 % (non-condensing)

## Technical characteristics - F.O. termination

### Ethernet interface – F.O.

Number of ports	1x / 2x / 3x 100Base-FX
Cable types according to IEEE 802.3	<ul style="list-style-type: none"> <li>• Multimode fibre, 1300 nm; 50 / 125 µm or 62.5 / 125 µm</li> <li>• Singlemode fibre, 1300 nm; 9 µm</li> </ul>
Data rate	100 Mbit/s
Maximum cable length	2000 m (Multimode) 15 km (Singlemode)
Termination	SC-D female / ST female
Diagnostics (via LED)	<ul style="list-style-type: none"> <li>• Status Link – Green</li> <li>• Data transfer (Act) – Green flashing</li> </ul>
Wavelength	1300 nm
Transceive power T(X) max. (dynamic)	<ul style="list-style-type: none"> <li>• -14 dBm (50 / 125 µm)</li> <li>• -14 dBm (62.5 / 125 µm)</li> </ul>
Transmission power T(X) min.	<ul style="list-style-type: none"> <li>• -23.5 dBm (50 / 125 µm)</li> <li>• -20 dBm (62.5 / 125 µm)</li> </ul>
Receive power RX typical (dynamic)	<ul style="list-style-type: none"> <li>• -33.9 dBm (window)</li> <li>• -35.2 dBm (centre)</li> </ul>
Receive power RX max. (dynamic)	-14 dBm
Signal detection (dynamic)	-33 dBm
Topology	Line, Ring, Star or mixed



**Ethernet Switch**  
**Ha-VIS mCon 3100-AV**  
 10-port Ethernet Switch for mounting onto top-hat mounting rail in control cabinets

Managed	IP 30	PROFINET compatible <input checked="" type="checkbox"/>	EtherNet/IP compatible <input checked="" type="checkbox"/>
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Number of ports, Copper / Termination	10x 10/100Base-T(X) / RJ45 (Twisted Pair)
Input voltage / Termination	24 V DC / 5-pole screw terminal, pluggable redundant power supply
Permissible range (min/max)	9.6 V ... 60 V DC
Input current	approx. 190 mA (at 24 V DC)
Alarm signalling contact	Change-over contact, potential-free, 24 V DC / 0.5 A 3-pole pluggable screw contact
Housing material	Metal (powder coated)
Dimensions (W x H x D)	60 x 132 x 104 mm (incl. cap, without connectors)
Weight	approx. 0.6 kg
Operating temperature	-40 °C ... +70 °C
Approvals	UL 508; UL 60 950-1
MTBF	625 000 h
Management	fully managed via Web interface and SNMP Functions see page A-4 3

mCon 3000

Identification	Part number	Drawing	Dimensions in mm
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<p>Ha-VIS mCon 3100-AV                  Ethernet Switch, managed                  10 RJ45 ports                  including                  Set for assembly on standard rail</p>	<p>20 76 110 4002</p>		
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## Ethernet Switch Ha-VIS mCon 3100-AAV

10-port Ethernet Switch for mounting onto top-hat mounting rail  
in control cabinets including 2 Gigabit ports;  
with extended temperature range

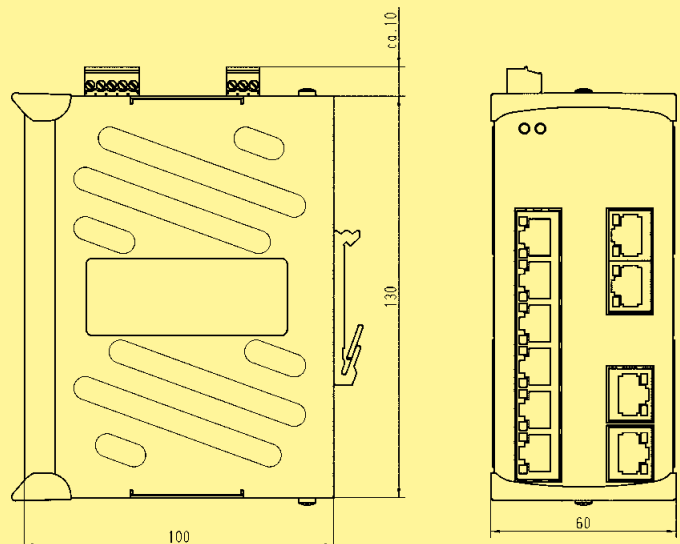
Managed	IP 30	PROFINET compatible <input checked="" type="checkbox"/>	EtherNet/IP compatible <input checked="" type="checkbox"/>
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Number of ports, Copper / Termination	8x 10/100Base-T(X) / RJ45 (Twisted Pair) 2x 10/100/1000Base-T(X) / RJ45 (Twisted Pair)
Input voltage / Termination	24 / 48 V DC / 5-pole screw terminal, pluggable redundant power supply
Permissible range (min/max)	9.6 V ... 60 V DC
Input current	approx. 260 mA (at 24 V DC)
Alarm signalling contact	Change-over contact, potential-free, 24 V DC / 0.5 A 3-pole pluggable screw contact
Housing material	Metal (powder coated)
Dimensions (W x H x D)	60 x 132 x 104 mm (incl. cap, without connectors)
Weight	approx. 0.6 kg
Operating temperature	-40 °C ... +70 °C
Approvals	UL 60 950-1
MTBF	720 000 h
Management	fully managed via Web interface and SNMP Functions see page A-4 3

Identification	Part number	Drawing	Dimensions in mm
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Ha-VIS mCon 3100-AAV  
Ethernet Switch, managed  
10 RJ45 ports  
including  
Set for assembly on standard rail

20 76 110 4003





## Ethernet Switch Ha-VIS mCon 3063-ADV

9-port Ethernet Switch for mounting onto top-hat mounting rail  
in control cabinets including 3 F.O. ports (SC, MM)

Managed	IP 30	PROFINET compatible <input checked="" type="checkbox"/>	EtherNet/IP compatible <input checked="" type="checkbox"/>
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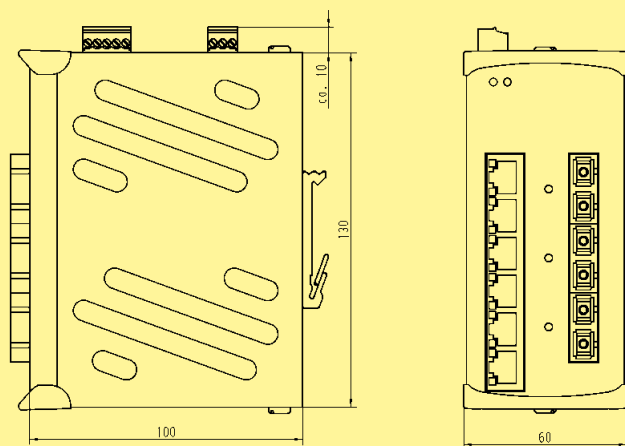
Number of ports, Copper / Termination	6x 10/100Base-T(X) / RJ45 (Twisted Pair)
Number of ports, F.O. / Termination	3x 100Base-FX / SC-D female
Input voltage / Termination	24 V DC / 5-pole screw terminal, pluggable redundant power supply
Permissible range (min/max)	9.6 V ... 60 V DC
Input current	approx. 320 mA (at 24 V DC)
Alarm signalling contact	Change-over contact, potential-free, 24 V DC / 0.5 A 3-pole pluggable screw contact
Housing material	Metal (powder coated)
Dimensions (W x H x D)	60 x 132 x 104 mm (incl. cap, without connectors)
Weight	approx. 0.6 kg
Operating temperature	-40 °C ... +70 °C
Approvals	UL 508; UL 60 950-1
MTBF	710 000 h
Management	fully managed via Web interface and SNMP Functions see page A-4 3

mCon 3000

Identification	Part number	Drawing	Dimensions in mm
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Ha-VIS mCon 3063-ADV  
Ethernet Switch, managed  
6 RJ45 ports  
3 SC ports  
including  
Set for assembly on standard rail

20 76 109 4101





## Ethernet Switch Ha-VIS mCon 3082-ADV

10-port Ethernet Switch for mounting onto top-hat mounting rail  
in control cabinets including 2 F.O. ports (SC, MM)

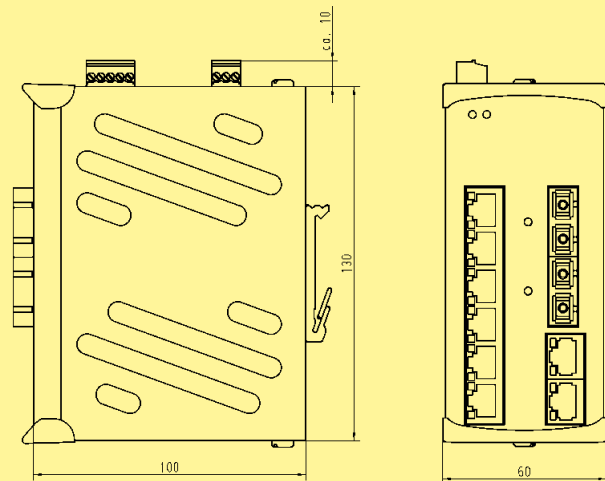
Managed	IP 30	PROFINET compatible <input checked="" type="checkbox"/>	EtherNet/IP compatible <input checked="" type="checkbox"/>
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Number of ports, Copper / Termination	8x 10/100Base-T(X) / RJ45 (Twisted Pair)
Number of ports, F.O. / Termination	2x 100Base-FX / SC-D female
Input voltage / Termination	24 V DC / 5-pole screw terminal, pluggable redundant power supply
Permissible range (min/max)	9.6 V ... 60 V DC
Input current	approx. 290 mA (at 24 V DC)
Alarm signalling contact	Change-over contact, potential-free, 24 V DC / 0.5 A 3-pole pluggable screw contact
Housing material	Metal (powder coated)
Dimensions (W x H x D)	60 x 132 x 104 mm (incl. cap, without connectors)
Weight	approx. 0.6 kg
Operating temperature	-40 °C ... +70 °C
Approvals	UL 508; UL 60 950-1; DNV
MTBF	560 000 h
Management	fully managed via Web interface and SNMP Functions see page A-4 3

Identification	Part number	Drawing	Dimensions in mm
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Ha-VIS mCon 3082-ADV  
Ethernet Switch, managed  
8 RJ45 ports  
2 SC ports  
including  
Set for assembly on standard rail

20 76 110 4101





## Ethernet Switch Ha-VIS mCon 3082-AFV

10-port Ethernet Switch for mounting onto top-hat mounting rail  
in control cabinets including 2 F.O. ports (SC, SM)

Managed	IP 20	PROFINET compatible <input checked="" type="checkbox"/>	EtherNet/IP compatible <input checked="" type="checkbox"/>
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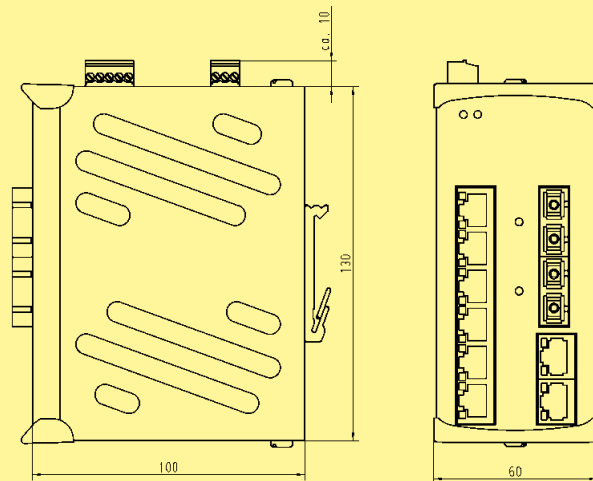
Number of ports, Copper / Termination	8x 10/100Base-T(X) / RJ45 (Twisted Pair)
Number of ports, F.O. / Termination	2x 100Base-FX / SC-D female
Input voltage / Termination	24 V DC / 5-pole screw terminal, pluggable redundant power supply
Permissible range (min/max)	9.6 V ... 60 V DC
Input current	approx. 270 mA (at 24 V DC)
Alarm signalling contact	Change-over contact, potential-free, 24 V DC / 0.5 A 3-pole pluggable screw contact
Housing material	Metal (powder coated)
Dimensions (W x H x D)	60 x 132 x 104 mm (incl. cap, without connectors)
Weight	approx. 0.6 kg
Operating temperature	-40 °C ... +70 °C
Approvals	cUL (in preparation)
Management	fully managed via Web interface and SNMP Functions see page A-4 3

mCon 3000

Identification	Part number	Drawing	Dimensions in mm
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Ha-VIS mCon 3082-AFV  
Ethernet Switch, managed  
8 RJ45 ports  
2 ST port  
including  
Set for assembly on standard rail

20 76 110 4102





## Ethernet Switch Ha-VIS mCon 3063-AEV

9-port Ethernet Switch for mounting onto top-hat mounting rail  
in control cabinets including 3 F.O. ports (ST, MM)

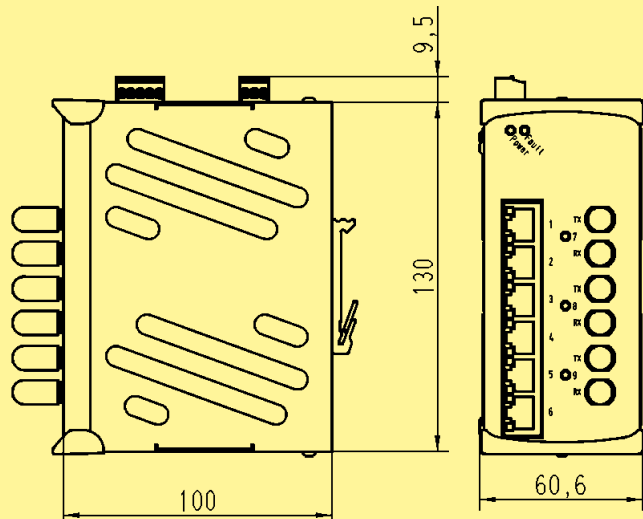
Managed	IP 20	PROFINET compatible <input checked="" type="checkbox"/>	EtherNet/IP compatible <input checked="" type="checkbox"/>
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Number of ports, Copper / Termination	6x 10/100Base-T(X) / RJ45 (Twisted Pair)
Number of ports, F.O. / Termination	3x 100Base-FX / ST female
Input voltage / Termination	24 V DC / 5-pole screw terminal, pluggable redundant power supply
Permissible range (min/max)	9.6 V ... 60 V DC
Input current	approx. 320 mA (at 24 V DC)
Alarm signalling contact	Change-over contact, potential-free, 24 V DC / 0.5 A 3-pole pluggable screw contact
Housing material	Metal (powder coated)
Dimensions (W x H x D)	60 x 132 x 104 mm (incl. cap, without connectors)
Weight	approx. 0.6 kg
Operating temperature	-40 °C ... +70 °C
Approvals	UL 508; UL 60 950-1
MTBF	710 000 h
Management	fully managed via Web interface and SNMP Functions see page A-4 3

Identification	Part number	Drawing	Dimensions in mm
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Ha-VIS mCon 3063-AEV  
Ethernet Switch, managed  
6 RJ45 ports  
3 ST ports  
including  
Set for assembly on standard rail

20 76 109 4201





## Ethernet Switch Ha-VIS mCon 3082-AEV

10-port Ethernet Switch for mounting onto top-hat mounting rail  
in control cabinets including 2 F.O. ports (ST, MM)

Managed	IP 20	PROFINET compatible <input checked="" type="checkbox"/>	EtherNet/IP compatible <input checked="" type="checkbox"/>
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Number of ports, Copper / Termination	8x 10/100Base-T(X) / RJ45 (Twisted Pair)
Number of ports, F.O. / Termination	2x 100Base-FX / ST female
Input voltage / Termination	24 V DC / 5-pole screw terminal, pluggable redundant power supply
Permissible range (min/max)	9.6 V ... 60 V DC
Input current	approx. 290 mA (at 24 V DC)
Alarm signalling contact	Change-over contact, potential-free, 24 V DC / 0.5 A 3-pole pluggable screw contact
Housing material	Metal (powder coated)
Dimensions (W x H x D)	60 x 132 x 104 mm (incl. cap, without connectors)
Weight	approx. 0.6 kg
Operating temperature	-40 °C ... +70 °C
Approvals	UL 508; UL 60 950-1; DNV
MTBF	560 000 h
Management	fully managed via Web interface and SNMP Functions see page A-4 3

mCon 3000

Identification	Part number	Drawing	Dimensions in mm
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Ha-VIS mCon 3082-AEV  
Ethernet Switch, managed  
8 RJ45 ports  
2 ST ports  
including  
Set for assembly on standard rail

20 76 110 4201

