

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



General Description

Features

The fully managed Ethernet Switches of the product family HARTING 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 mCon 3000 Ethernet Switch family, with its integrated LEDs on each port, supports fast and easy network diagnosis.

The 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.

- 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

Advantages

Application fields

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

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

mCon 3000

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"> • Status Link – Green • Data transfer (Act) – Green flashing • Data transfer rate (Speed) – 1000 Mbit/s: Green 100 Mbit/s: Yellow 10 Mbit/s: OFF
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
mCon xxxx-AE	IP 20
Mounting	<ul style="list-style-type: none"> • 35 mm top-hat rail acc. to EN 60715 • Panel mounting, vertical assembly
Weight	approx. 0.6 kg

Environmental conditions

Operating temperature	0 °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	Multimode fibre, 1300 nm; 50 / 125 µm or 62.5 / 125 µm
Data rate	100 Mbit/s
Maximum cable length	2000 m (Multimode)
Termination	SC-D female / ST female
Diagnostics (via LED)	<ul style="list-style-type: none"> • Status Link – Green • Data transfer (Act) – Green flashing
Wavelength	1300 nm
Transceive power T(X) max. (dynamic)	<ul style="list-style-type: none"> • -14 dBm (50 / 125 µm) • -14 dBm (62.5 / 125 µm)
Transmission power T(X) min.	<ul style="list-style-type: none"> • -23.5 dBm (50 / 125 µm) • -20 dBm (62.5 / 125 µm)
Receive power RX typical (dynamic)	<ul style="list-style-type: none"> • -33.9 dBm (window) • -35.2 dBm (centre)
Receive power RX max. (dynamic)	-14 dBm
Signal detection (dynamic)	-33 dBm
Topology	Line, Ring, Star or mixed



Ethernet Switch
HARTING 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 ... 36 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	0 °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-3 3

Identification	Part number	Drawing	Dimensions in mm
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HARTING mCon 3100-AV Ethernet Switch, managed 10 RJ45 ports including Set for assembly on standard rail	20 76 110 4002		
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mCon 3000



Ethernet Switch HARTING 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-3 3

Identification	Part number	Drawing	Dimensions in mm
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<p>HARTING mCon 3100-AAV Ethernet Switch, managed 10 RJ45 ports including Set for assembly on standard rail</p>	<p>20 76 110 4003</p>		<p>Dimensions in mm</p>
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mCon 3000



Ethernet Switch HARTING mCon 3061-ADV

7-port Ethernet Switch for mounting onto top-hat mounting rail
in control cabinets including 1 F.O. port (SC, MM)

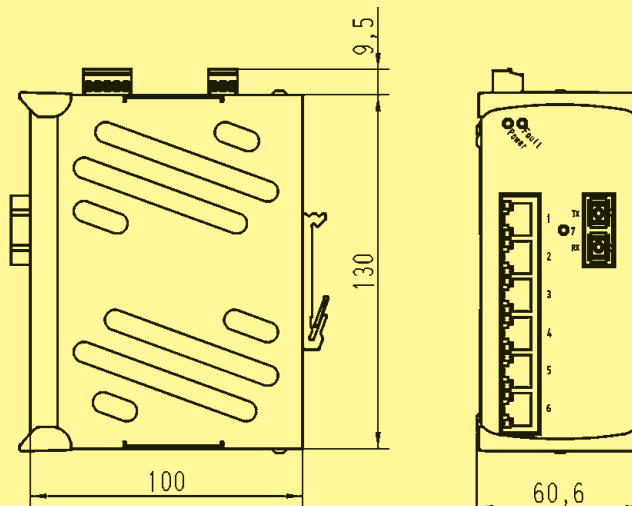
Managed	IP 30	PROFINET compatible <input checked="" type="checkbox"/>	EtherNet/IP compatible <input checked="" type="checkbox"/>
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Number of ports, Copper / Termination	6x 10/100Base-T(X) / RJ45 (Twisted Pair)
Number of ports, F.O. / Termination	1x 100Base-FX / SC-D female
Input voltage / Termination	24 V DC / 5-pole screw terminal, pluggable redundant power supply
Permissible range (min/max)	9.6 V ... 36 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	0 °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:3 3

Identification	Part number	Drawing	Dimensions in mm
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HARTING mCon 3061-ADV
Ethernet Switch, managed
6 RJ45 ports
1 SC port
including
Set for assembly on standard rail

20 76 107 4101





Ethernet Switch HARTING mCon 3063-ADV

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

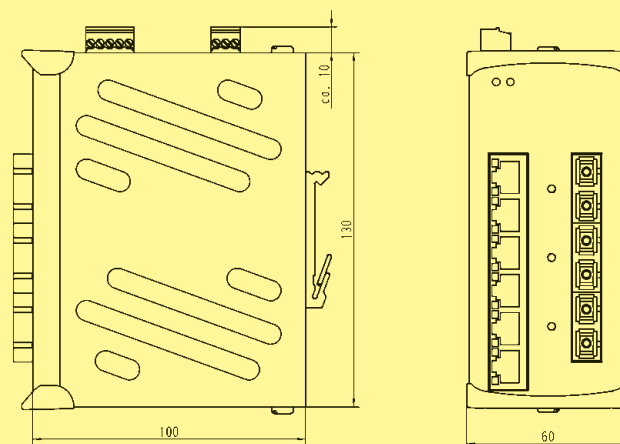
Managed	IP 30	PROFINET compatible <input checked="" type="checkbox"/>	EtherNet/IP compatible <input checked="" type="checkbox"/>
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Number of ports, Copper / Termination	6x 10/100Base-T(X) / RJ45 (Twisted Pair)
Number of ports, F.O. / Termination	3x 100Base-FX / SC-D female
Input voltage / Termination	24 V DC / 5-pole screw terminal, pluggable redundant power supply
Permissible range (min/max)	9.6 V ... 36 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	0 °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:3 3

Identification	Part number	Drawing	Dimensions in mm
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HARTING 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
HARTING 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 ... 36 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	0 °C ... +70 °C
Approvals	UL 508; UL 60 950-1
MTBF	560 000 h
Management	fully managed via Web interface and SNMP Functions see page A:3 3

Identification	Part number	Drawing	Dimensions in mm
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HARTING mCon 3082-ADV Ethernet Switch, managed 8 RJ45 ports 2 SC ports including Set for assembly on standard rail	20 76 110 4101		
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Ethernet Switch HARTING mCon 3061-AEV

7-port Ethernet Switch for mounting onto top-hat mounting rail
in control cabinets including 1 F.O. port (ST, MM)

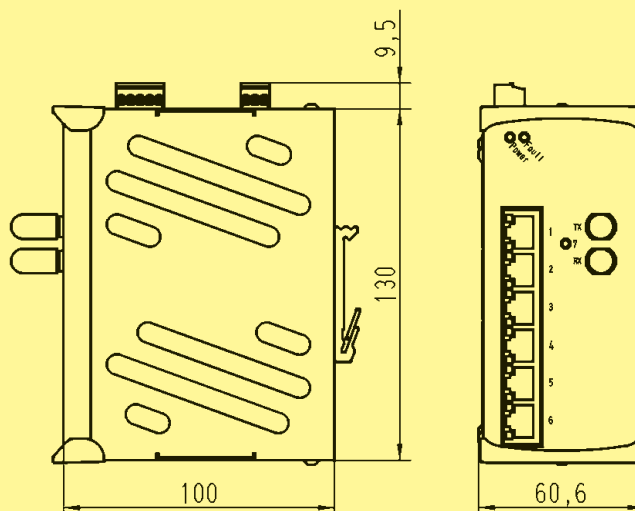
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Number of ports, Copper / Termination	6x 10/100Base-T(X) / RJ45 (Twisted Pair)
Number of ports, F.O. / Termination	1x 100Base-FX / ST female
Input voltage / Termination	24 V DC / 5-pole screw terminal, pluggable redundant power supply
Permissible range (min/max)	9.6 V ... 36 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	0 °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:3 3

Identification	Part number	Drawing	Dimensions in mm
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HARTING mCon 3061-AEV
Ethernet Switch, managed
6 RJ45 ports
1 ST port
including
Set for assembly on standard rail

20 76 107 4201





Ethernet Switch HARTING mCon 3063-AEV

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

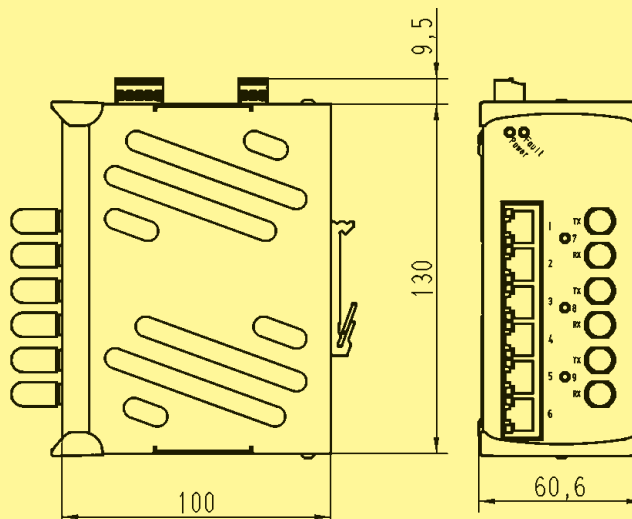
Managed	IP 20	PROFINET compatible <input checked="" type="checkbox"/>	EtherNet/IP compatible <input checked="" type="checkbox"/>
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Number of ports, Copper / Termination	6x 10/100Base-T(X) / RJ45 (Twisted Pair)
Number of ports, F.O. / Termination	3x 100Base-FX / ST female
Input voltage / Termination	24 V DC / 5-pole screw terminal, pluggable redundant power supply
Permissible range (min/max)	9.6 V ... 36 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	0 °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:3 3

Identification	Part number	Drawing	Dimensions in mm
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HARTING 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 HARTING 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 ... 36 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	0 °C ... +70 °C
Approvals	UL 508; UL 60 950-1
MTBF	560 000 h
Management	fully managed via Web interface and SNMP Functions see page A:3 3

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

20 76 110 4201

