

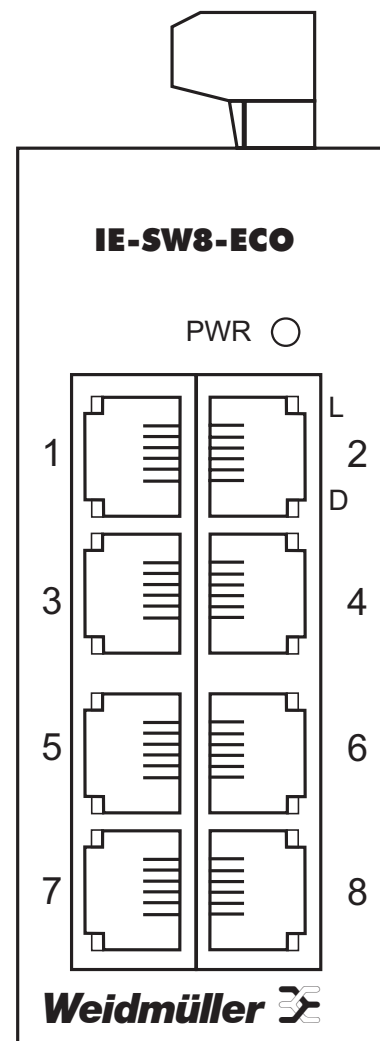


Information Leaflet

Industrial Ethernet 10/100 MBit/s ECO-Switch

IE-SW8-ECO

8829430000



Version 1.0

GB No Warranty. The technical documentation is supplied without any warranty of fitness. Weidmueller does not warrant for their accuracy. The documentation may contain technical and typographical inaccuracies. Weidmueller reserves the right to change it without notice.

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1 Instructions

1.1 Safty instructions



Warning

- Using this product beyond the specifications or disregard of using instructions and warnings can cause grave malfunctions so that personal injury and material damages occur. Use the product only in accordance with the requirements.
- In the case of malfunction or failure of the IE-SW8-ECO cannot be predicted the behaviour by other connected devices of an arrangement. It can occur personal injury and material damages. Make only settings, if you are informed exactly about all effects in the whole arrangement.

1.2 CE Marking



This product confirms to the required regulations of the European Union (EU). This product is marked with the CE marking.

1.3 Class I Division 2



Warning

- Substitution of components may impair suitability for Class I Division 2. It occur Explosion Hazard. You make sure, the modules are open devices intended for installation/dismounting in an ultimate enclosure suitable for the intended application.
- Do not disconnect equipment unless power has been switched off or the area is known to be Non-hazardous. It occur Explosion Hazard. Use only for the application in Class I Div 2 certain connections with this device. Follow the allowed environment temperature range by the installation.



This equipment is suitable for use in Class I Division 2, Groups A, B, C, and D or Non-Hazardous locations only.

1.4 Recycling in accordance with WEEE



B2B disposal

Dear Weidmueller Customer, purchasing our product gives you the opportunity to return the device to Weidmueller at the end of its service life. The EU Directive 2002/ 96 EC (WEEE) regulates the return and recycling of waste electrical and electronics equipment. In the Business to Business sector (B2B), manufacturers of electrical equipment are obliged as of 13/08/05 to take back and recycle free of charge electrical equipment sold after that date. After that date, electrical equipment must not be disposed through the "normal waste disposal channels". Electrical equipment must then be disposed of and recycled separately. All devices that fall under the directive must feature this logo.

What we can do for you?

Weidmueller offers you the possibility of returning your old device to us at no extra charge. Weidmueller will then professionally recycle and dispose of your device in accordance with the actual laws.

What do you have to do?

Once your device has reached the end of its lifecycle, simply return it (in the carton) to the Weidmueller sales agent responsible for you. We will then take care of all recycling and waste disposal measures. You will incur no costs or suffer any inconvenience.

2 Technical specification

The IE-SW8-ECO switching hub is designed for the Industrial Automation environment (IP20). Like all Ethernet switches from Weidmüller, it features non-blocking (full wire-speed) operation. It divides an Ethernet network into five collision domains – “bridging” data links to create larger network diameters than possible with repeating hubs.

Each port automatically negotiates its data rate to 10 Mbps or 100 Mbps – controlling data flow with the PAUSE function in full-duplex links or with the backpressure method in half-duplex links. Port assignments are learned by reading Ethernet frames and logging the source addresses to a table. Throughput is improved by restricting traffic to those ports party to a data exchange – while other data is simultaneously exchanged on other ports.

Store-and-forward operation is implemented and broadcast, multicast, or unicast transmissions are received by all ports.

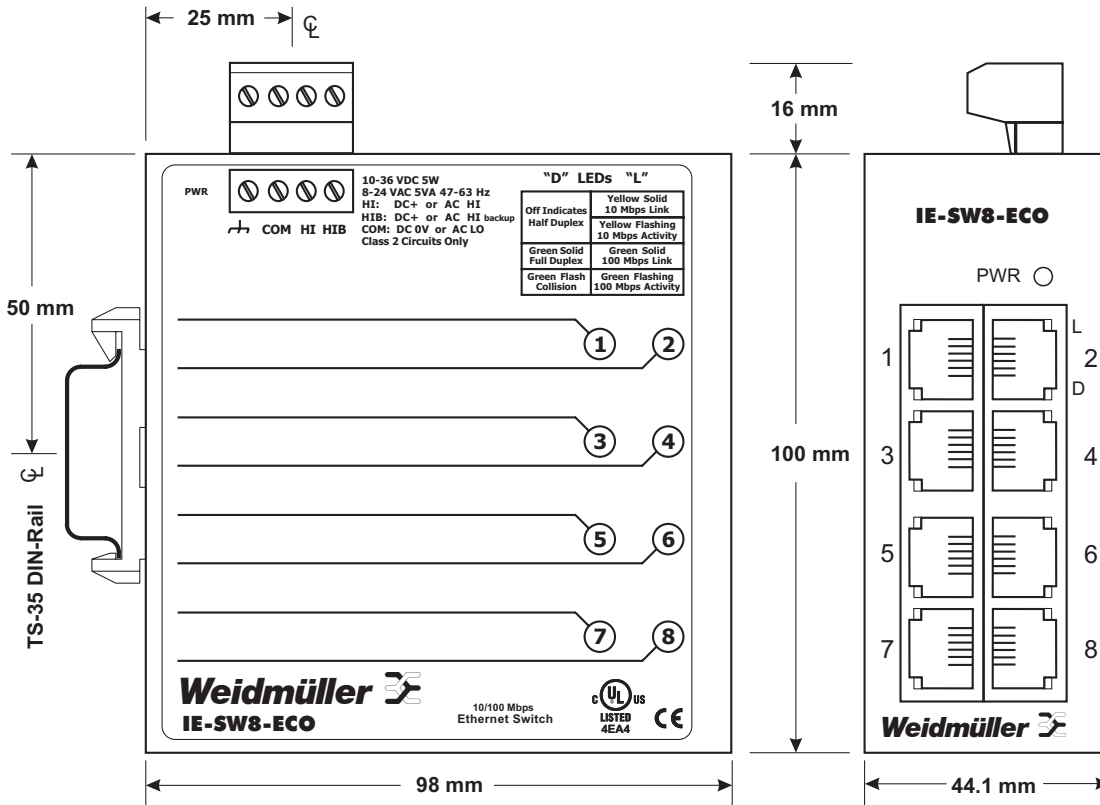
The IE-SW8-ECO has eight Auto-MDIX ports for attaching local devices. In addition to a power LED, each port has one LED showing link/activity/rate and one showing duplex status. The unit operates from a wide range of low-voltage AC or DC power.

The IE-SW8-ECO is provided with a writable label for easy identification of the remote device attached to each cable.

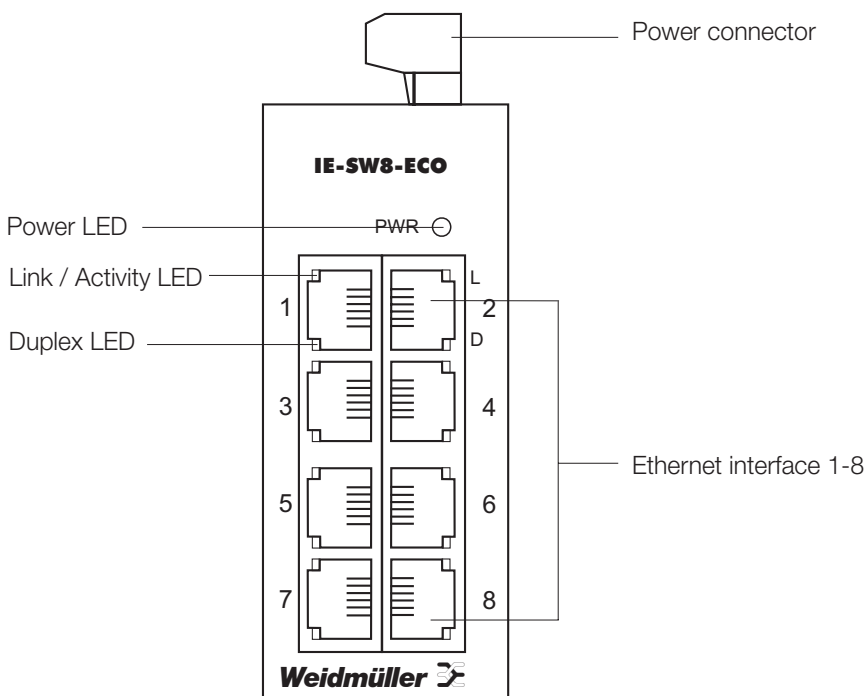
2.1 Intended use

The IE-SW8-ECO is designed for the application in the industrial environment (IP20). The product is equipped with Ethernet interfaces and serves exclusively for the connecting of components inside of network. The data communication between these network participants is enable by the connection of network components.

2.2 Dimensions



2.3 Front view



2.4 LED

LED:		
Power	green	valid power supply
	red	invalid power supply
Link / Activity	green	100 Mbit/s Link
	green flashes	100 Mbit/s Link traffic
	yellow	10 Mbit/s Link
	gelb flashes	10 Mbit/s Link traffic
Duplex	green	Full-duplex
	off	Half-duplex

2.5 Power supply



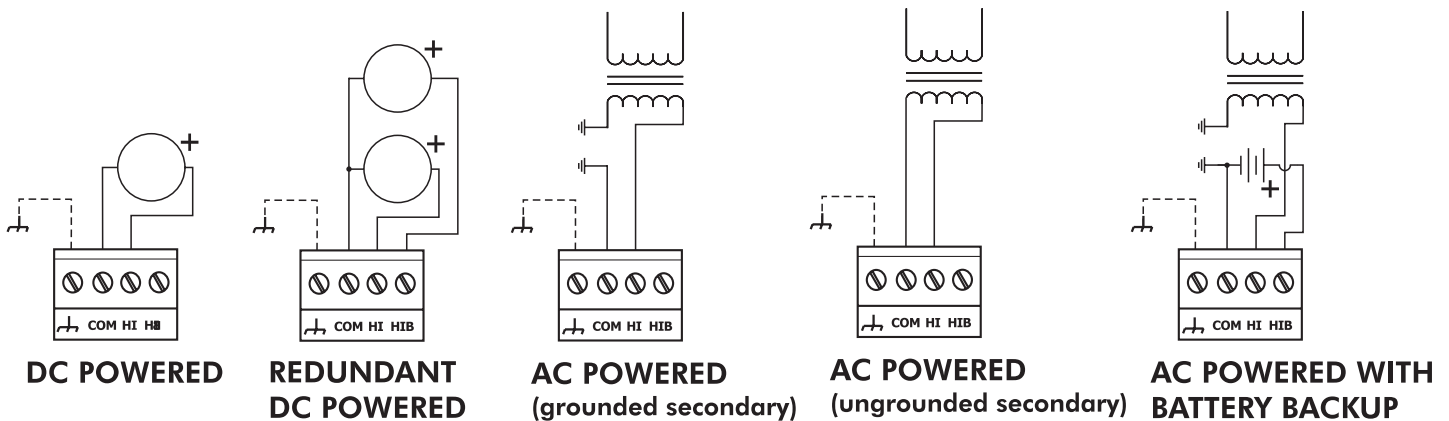
Caution

Insecure outputs. Operations on the IE-SW8-ECO only realise by qualified employees. Use a power supply unit according to DIN EN 60742 (VDE 0551). Secure all electrical outputs.



- The switch operates with Auto-MDIX technology, so straight-through or crossover cables can be used to connect network interfaces or other network devices.
- The chassis connecting serves as an additionally ground.

Supply voltage	10 ... 36 V DC / 8 ... 24 V AC
Power (max)	5 W / 5 VA



3 Mounting



Caution

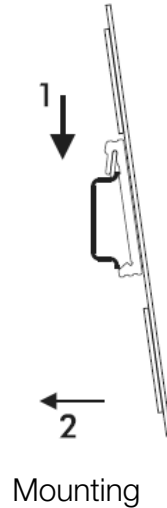
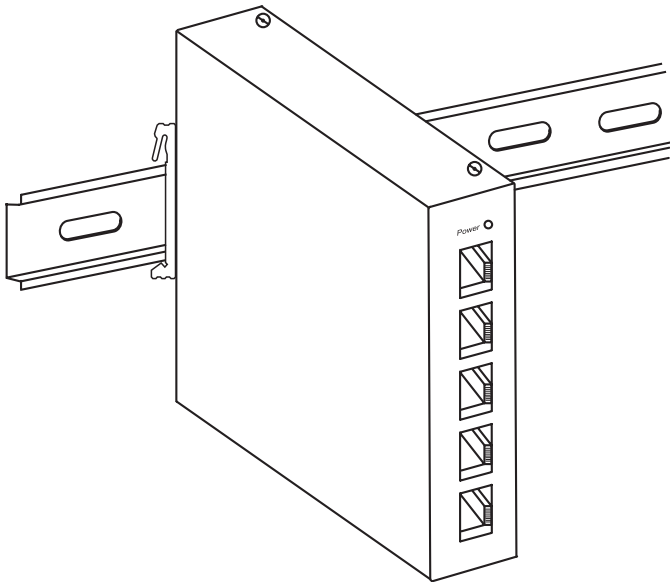
- The IE-SW8-ECO is designed for top hat rail mounting according to standard EN50022. Using a different top hat rail can result in improper mounting. Use a top hat rail according to standard EN 50022. Pay attention to the mounting instructions of the manufacturer.

- It is not allowed to mount or demount the IE-SW8-ECO during operation.

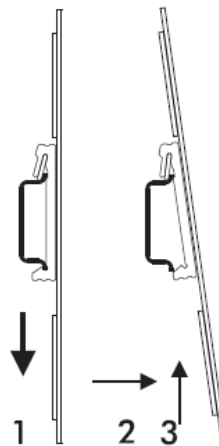


- There must be 2" (ca. 5 cm) free space on both sides (top and bottom) and also on the sidewalls for ventilation to the next device.
- To ensure proper ventilation through the device the unit shall be mounted on a DIN-Rail which is oriented horizontal on the vertical rear wall of the control cabinet.

De-) Mounting on the top-hat rails



Mounting



Demounting

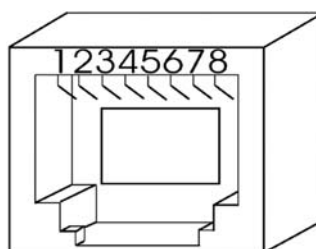
4 Technical Data

Electrical Data	
Power supply	The power supply of the IE-SW8-ECO must be provided exclusively by a power supply unit which complies with DIN EN 60742 or VDE 0551.
Rated operation voltage	10 ... 35 V DC / 8 ... 24 V AC
Rated operation capacity	5 W / 5 VA
Rated frequency	47 ... 63 Hz
Degree of protection	IP20

Ambient Conditions	
Operation temperature	0°C ... +60°C
Storage temperature	-40°C ... +85°C
Mounting	
DIN-rail	TS-35 according EN 50022
Functional	
Compliance	ANSI/IEEE 802.3
Data rate	10 /100 Mbit/s
Signalling	10 Base-T / 100 Base-TX
Connectors	shielded RJ-45
Segment length (max.)	100 m

RJ45 Connector, PIN Assignment

PIN	Funkcion
1	TD+
2	TD-
3	RD+
6	RD-



5 Specifications

EMC

EN 61000-4-2 (ESD) 6kV/8kV
 EN 61000-4-3 (radiated immunity)
 ENV 50204 @AM 10V/average 80MHz - 1,0GHz
 EN 61000-4-4 (burst) ~ 2kV; 2kV; I/O 1kV
 EN 61000-4-5 (surge) 2/1kV
 EN 61000-4-6 (conducted immunity)
 ENV 50204 @10V 150kHz - 80MHz
 EN 61000-4-11 (voltage variation)
 EN 55022 (HF E)
 conducted emissions 150kHz - 30MHz
 radiated emissions 30MHz - 1GHz pp/average
 radiated emissions 30MHz - 1GHz pp/qp

Environment-test

IEC 60068-2-1 & IEC 60068-2-2
 operating 0°C ... 60°C
 non operating -40°C ... 85°C

Certifications	
	UL Listed Industrial Control Equipment, certified1 for US and Canada.
	CE marking within the EU
	GOST R-certification (IEC standards with Russian deviations)

6 Warranty of this product

Weidmueller gives a 2 year warranty on all its actively processing Industrial Ethernet products and all actively processing I/O-Interface products in accordance with the warranty terms as described in the general conditions of sale of the Weidmueller company which has sold the products to you.

In addition to the 2 year warranty, Weidmueller warrants to you for a period of 3 additional years that such products the defects of which have already existed at the time when the risk passed will be repaired by Weidmueller free of charge or that Weidmueller will provide a new, functionally equivalent product to replace the defective one.

The warranty referred to above covers Weidmueller products. Safe where expressly described otherwise in writing in this catalogue/product description, Weidmueller gives no warranty or guarantee as to the interoperability in specific systems or as to the fitness for any particular purpose. To the extent permitted by law, any claims for damages and reimbursement of expenses, based on whatever legal reason, including contract or tort, shall be excluded. Where not expressly stated otherwise in this warranty, the general conditions of purchase and the expressive liability commitments therein of the respective Weidmueller Company which has sold the products to you shall be applicable.

Manufacturer:

Weidmueller Interface GmbH & Co. KG
Klingenbergstraße 16
32758 Detmold
Germany

Technical Support:

If you have further questions or suggestions to the IE-SW8-ECO, our technical support will help you with pleasure.

E-Mail: ie-support@weidmueller.de