

D Bedienungsanleitung

GB Operating instruction

IE-SW14-24-M managed Switch

IE-SW8-M	8845740000
IE-SW6/2SCS-M	8851850000
IE-SW6/2SC-M	8845840000
IE-SW6/2ST-M	8845850000
IE-SW16-M	8845800000
IE-SW14/2SCS-M	8851860000
IE-SW14/2SC-M	8845780000
IE-SW14/2ST-M	8845790000
IE-SW24-M	8845830000
IE-SW22/2SCS-M	8851870000
IE-SW22/2SC-M	8845810000
IE-SW22/2ST-M	8845820000

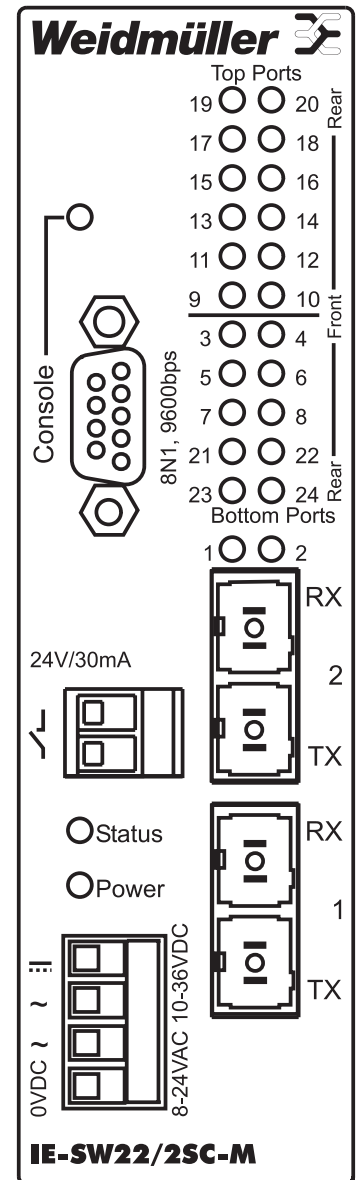


Table of content

Introduction
Specifications
Dimensional Drawing
Segment length
Installation
Connections
Auto-MDIX
LED
Fault Relay
Power options
Management Features
Declaration of conformity
Warranty

Introduction

With the new IE-SW14-24-M facility we provide up to the 24 Ethernet ports (10/100 BaseT/TX) for the control cabinet (DIN-Rail).

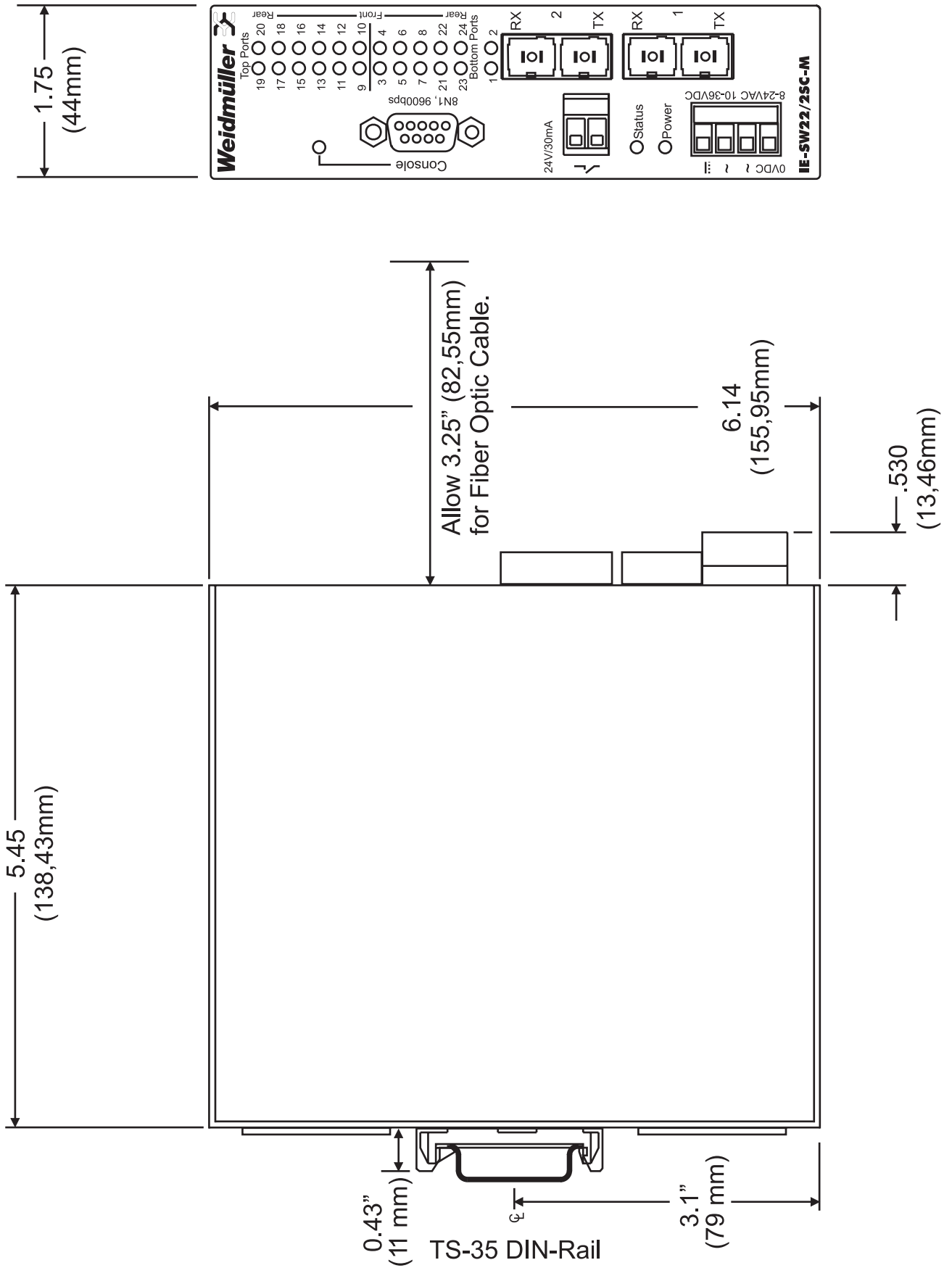
Many applications need switches in the control cabinet for the distributed construction of industrial networks. The Switch is a Plug and Play device with ST or SC fiber connections.

The devices can be operated in an ambient temperature range from 0 °C to +60 °C.

Technical details

Case:	Solid case of aluminum (IP 20)	Compatibility:	IEEE 802.3x and more
Dimensions:	140 x 44 x 156 (in mm)	Din-Rail:	TS35
Input Voltage:	DC 10 – 36 V, AC 8-24 V	Data Rate:	10BaseT/100BaseTX (Copper) 100BaseFX (Fiber)
Input Power:	Max. 20 W, power supply must deliver a minimum of 6 Amps when device is turned on	PLC:	fault relay for PLC support
Temperature:	0 °C up to +60 °C	Segment Length:	Copper 100 m Fiber (multimode) 2000 m
LED:	Speed / Link/ Activity/ Temperature	General Specifications:	256 Kbyte/ per 8 Port Buffer 4 K MAC addresses per 8 Port
Ports:	RJ-45 on top and bottom Fiber ST or SC 2 Fiber / copper	Aging:	300s
		Optical Budget:	8 dB at 62,5µm/125µm MM cable 4 dB at 50µm/125µm MM cable 13 dB at 9µm/125µm SM cable
		Approval:	CE, UL 508, c-UL

Dimensional Drawing

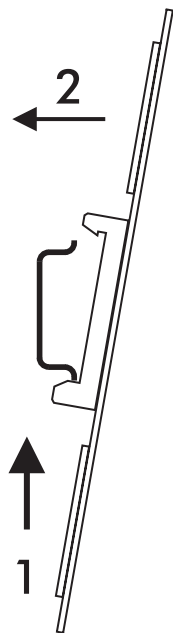


Segment Length

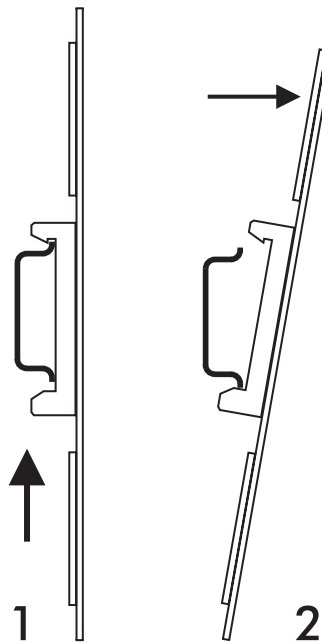
10 Base T	copper	100 m
100 Base TX	copper	100 m
100 Base FX	multimode fiber	2000 m Full Duplex
	<ul style="list-style-type: none"> connector SC and ST 	Halb Duplex is not supported 1310 nm/ 62.5/ 125 µm optical budget 8 db 50/ 125 µm optical budget 4 dB
	singlemode fiber	
	<ul style="list-style-type: none"> connector SCS 	9/ 125 µm cable 13 dB

Installation

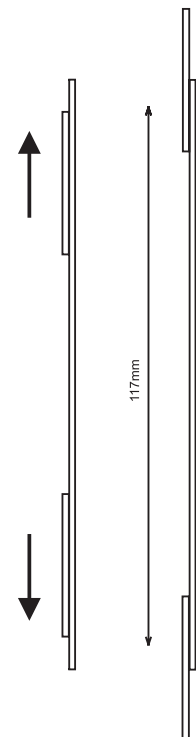
The IE-SW14-24-M is for wall mounting and DIN-Rail mounting.



DIN-Rail mounting



Taking off the DIN-Rail



Wall mounting
Remove the infolded brackets
Fix the brackets out-folded



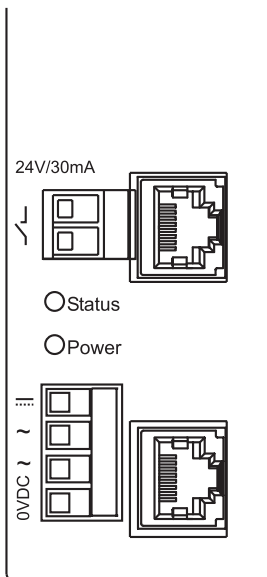
Only a qualified technician is allowed to install and operate the Switch.



Note

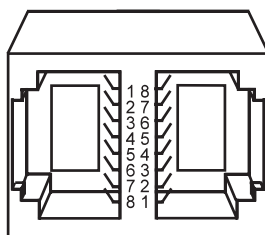
There must be 25 mm free space on both sides for ventilation to the neighbour on the DIN-Rail.

Connections

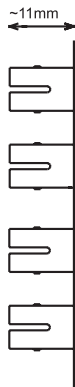
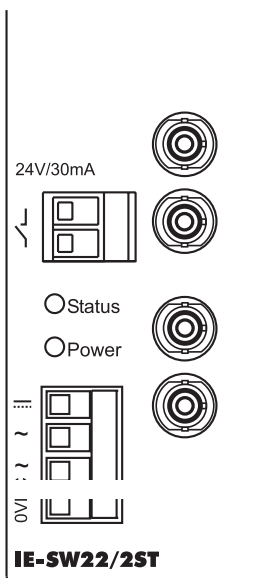


RJ-45 connector

- copper
- segment length up to 100 m

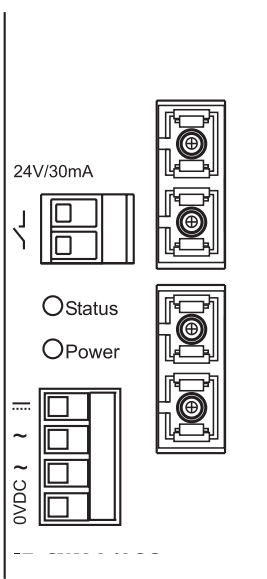


PIN	Function
1	TD+
2	TD-
3	RD+
4	not used
5	not used
6	RD--
7	not used
8	not used



ST-connector

- Multimode with 1310 nm
- segment length 2000 m
- full compliance with the optical performance requirements of 100 Base FX



SC-connector

- Multimode with 1310 nm
- segment length 2000 m
- full compliance with the optical performance requirements of 100 Base FX

Auto-MDIX

The switch works with AUTO-MDIX functionality. It is possible to use crossover and straight-through cables to connect network interfaces or other devices with the switch.

LED

Power	green	power on
	red	invalid incoming power
LNK / ACT	yellow	10 Mbit/s Link
	green	100 Mbit/s Link
	yellow flashes	10 Mbit/s Link traffic
	green flashes	100 Mbit/s Link traffic
Status	green	no problem
	red	fault description see handbook
Console	green	logged in
	off	logged out

Fault Relay

The error relay can be used to monitor the condition of the switch. If the switch is turned off the relay contacts are open. When power is being applied the contacts of the relay remain open until BOTH power inputs have reached a valid level. Only then the contacts are closed. If in the ongoing operation one of the voltage levels drops below the lower end the relay contacts are opened again. In case the switch is operated via one power input only a connection between the DC input and ONE of the AC inputs can be made to simulate the 2nd supply voltage. The relay is rated at 24 V with a maximum of 30 mA.

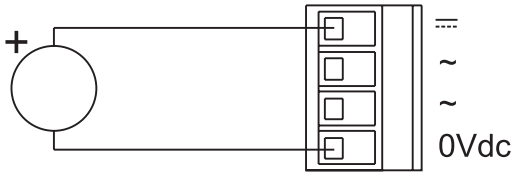
Power Options



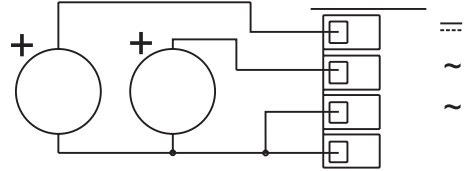
In all power schemes a fuse of 4 A slow is required in the power supply lines.

Note

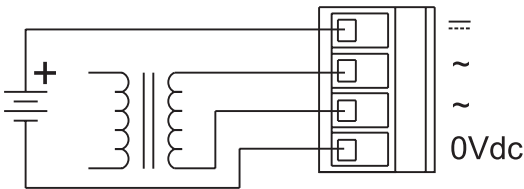
DC POWERED



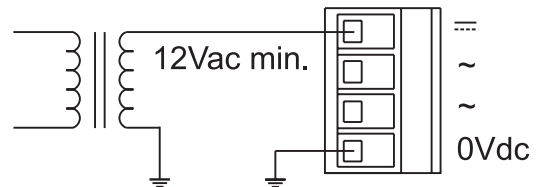
REDUNDANT DC POWERED



AC POWERED WITH BATTERY BACKUP

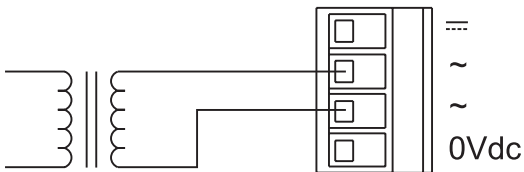


AC POWERED (grounded secondary)



The IE-SW-14 to 24-M Switch does NOT charge the battery, so separate provisions charging are required.

AC POWERED (ungrounded secondary)



CAUTION

The connection to the power supply should be done by a qualified technician only.

Use a Class 2 power supply only.

The power supply should be conform to DIN EN 60 742 (VDE 0551)



Note

On the bottom rear end a connection to functional earth is recommended. This connection is recommended by a 4 mm² cable with a 6.3 female spade terminal, the IE-SW14 to 24-M Line has the male spade terminal.

Management- Features

- SNMP V1
- Proprietary Redundancy
- 802.1Q VLAN
- Port based VLAN
- Port based QoS
- MAC based Trunking
- Port setup functionality
- Port mirroring
- Performance Monitoring
- Fault relay
- Serial interface for extensive setup
- Capabilities (menu driven)
- Ring Redundancy

Declaration of Conformity

Applied Council Directives:

Electromagnetic Compatibility Directive, 89/336/EEC Council Directive as amended by Council Directive 92/31/EEC & Council Directive 93/68/EEC
General Product Safety Directive 92/59/EEC

Standard to which Conformity is declared

EN 55022:1995, Class A, Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment
EN 55024:1998, Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement.

Warranty for this Product

Weidmüller 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 Weidmüller company which has sold the products to you.

In addition to the 2 year warranty, Weidmüller 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 Weidmüller free of charge or that Weidmüller will provide a new, functionally equivalent product to replace the defective one.

The warranty referred to above covers Weidmüller products. Save where expressly described otherwise in writing in this catalogue/product description, Weidmüller 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 Weidmüller company which has sold the products to you shall be applicable.

Manufacturer:

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

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

Keine Gewährleistung. Die technische Dokumentation wird ohne Mängelgewähr geliefert und Weidmüller übernimmt keine Gewährleistung für deren Genauigkeit. Die Dokumentation kann technische oder andere Ungenauigkeiten und typografische Fehler enthalten. Weidmüller behält sich das Recht vor, Änderungen ohne vorherige Ankündigung vorzunehmen.

All rights reserved. Reproduction, copying, or redistribution for commercial purpose of any Weidmüller material or design elements is strictly prohibited.

Alle Rechte vorbehalten. Nachdruck und Vervielfältigung der Texte und Graphiken einschließlich Speicherung und Nutzung auf optischen und elektronischen Datenträgern nur mit Zustimmung der Weidmüller GmbH & Co. KG. Die ganze oder teilweise Verwertung des Materials durch unberechtigte Dritte ist untersagt.