

**IE-SW-SPE05-4T1LMPODL-1TX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)

The unmanaged SPE switch from Weidmüller offers the solution for reliable and efficient networking. It enables the bridging of large distances of up to 1,000 m using the SPE standard 10Base-T1L (10 Mbit/s). Using this switch eliminates the need for subsystems or gateways, simplifying the network infrastructure and reducing complexity.

- Simple and space-saving installation, as both data transmission and power supply are provided via only one pair of wires (PoDL classes 10 - 14, up to 50 W, SCCP support)
- The unmanaged SPE switch from Weidmüller is compatible with all Ethernet and IP-based protocols and can be used universally
- Provides a reliable and efficient way to optimize network connectivity and increase system efficiency

**General ordering data**

Order No.	3012120000
Type	<a href="#">IE-SW-SPE05-4T1LMPODL-1TX</a>
GTIN (EAN)	40999869 18344
Qty.	1 items

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**Technical data**

**Approvals**

Approvals



ROHS	Conform
UL File Number Search	<a href="#">UL Website</a>
Certificate no. (cULus)	E141197

**Dimensions and weights**

Depth	108.3 mm	Depth (inches)	4.2638 inch
Height	145.1 mm	Height (inches)	5.7126 inch
Width	28 mm	Width (inches)	1.1024 inch
Net weight	530 g		

**Temperatures**

Storage temperature	40 °C...85 °C	Operating temperature	-40 °C...70 °C
Humidity	5 to 98% (non-condensing)		

**Environmental Product Compliance**

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cl
REACH SVHC	Lead 7439-92-1, Lead monoxide 1317-36-8
SCIP	9229992a-00b9-4096-8962-200a7f33e289

**EMC conformity and approvals**

Free fall	According to IEC 60068-2-32	EMC standards	EN 61000-6-2, EN 61000-6-4
Vibration	according to IEC 60068-2-6	Shock	according to IEC 60068-2-27
Railway	EN 50121-4	Safety standard	UL 61010-1, UL 61010-2-201

**Environmental conditions**

Operating temperature, max.	70 °C
Operating temperature, min.	-40 °C
Humidity	5 to 98% (non-condensing)
Storage temperature, max.	85 °C
Storage temperature, min.	40 °C
Operating altitude	Altitude, max. 2000 m

**Guarantee**

Time interval	5 years
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**Interfaces**

RJ45 ports	10/100BaseT(X), auto negotiation, Full-/half-duplex mode, Auto MDI/MDI-X port	Function DIP switch	MAC frame filtering (on/off), QoS (on/off), SPE-T1L (on/off), SPE-T1L (master/slave), PoDL (on/
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Number of ports	1x RJ45, 4x SPE port acc. to IEC 63171-2	LED indicator	off), PoDL SCCP (on/off), PoDL (24V/50V) Power LED: PWR, Port LED: LNK/ACT, 10/100M (RJ45 port), Port LED: LNK/ACT, 10M (SPE port), PoDL indicator
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**MTBF**

MTBF	According to Standard	Telcordia SR-332
	Operating time (hours), min.	692776 h
	Input voltage	24 V

**Management features**

Network traffic filter	Quality of Service (QoS)	Industrial protocol support	PROFINET device acc. to conformance class A
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**Power supply**

Reverse polarity protection	Yes	
Supply voltage	1 single input	
Overload current protection	Yes	
Connection type	1 removable 2-pin terminal block	
Voltage supply range	Voltage type	DC
	Voltage, min.	20 V
	Voltage, max.	30 V
Current consumption	Voltage	24 V
	Voltage type	DC
	Current consumption with Powered Device (PD)	3.47 A
	Current consumption without Powered Device (PD)	0.09 A

**Switch characteristics**

Priority queues	4	MAC table size	1 K
Packet buffer size	128 kbit	Bandwidth backplane	280 Mbit/s

**Technical data**

Housing main material	Metal	
Type of mounting	DIN rail	
Protection degree	IP30	
Speed	Fast Ethernet, 10BaseT1L	
PoDL output power	Standard	IEEE 802.3cg
	Voltage according to PoDL class	24 V
	PoDL class	10
	Output power	1.85 W
	Standard	IEEE 802.3cg
	Voltage according to PoDL class	24 V
	PoDL class	11
	Output power	4.8 W
	Standard	IEEE 802.3cg
	Voltage according to PoDL class	24 V
	PoDL class	12
	Output power	12.63 W
	Standard	IEEE 802.3cg
	Voltage according to PoDL class	50 V

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**Technical data**

	PoDL class	13
	Output power	11.54 W
	Standard	IEEE 802.3cg
	Voltage according to PoDL class	50 V
	PoDL class	14
	Output power	30 W
Switch	unmanaged	
PoDL power budget	Voltage type	DC
	Voltage, min.	24 V
	Voltage, max.	30 V
	Power budget	80 W

**Technology**

Data switching	Store and Forward	Flow control	IEEE 802.3x flow control
Standard	IEEE 802.3 for 10BASE-T, IEEE 802.3u for 100BASE-TX, IEEE 802.3x for flow control, IEEE 802.3cg for 10Base-T1L		

**Important note**

Product information	Only powered devices with the same voltage can be operated at the same time.
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**Classifications**

ETIM 8.0	EC000734	ETIM 9.0	EC000734
ETIM 10.0	EC000734	ECLASS 14.0	19-17-04-02
ECLASS 15.0	19-17-04-02		

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## Accessories

### IP20 Patch Cable



Single pair Ethernet is a technology that only requires one pair of wires to transmit data and power. The resulting benefits will make SPE the preferred network at the field level and beyond. Advantages of Single Pair Ethernet

- Consistent: Single Pair Ethernet enables uniform Ethernet-based communication from the sensor to the cloud
- Future-proof: key technology for Industry 4.0 and IIoT
- Flexible: ranges of up to 1000 m and transmission properties of up to 1 Gbps enable use across applications
- Innovative: lighter, less space required, and reduced installation effort

### General ordering data

Type	IE-S1DS2VE0010T01T01-E	Version
Order No.	<a href="#">2725850010</a>	Patch cable, SPE plug (IEC 63171-2) - IP20 socket contact straight,
GTIN (EAN)	4050118824544	SPE plug (IEC 63171-2) - IP20 socket contact straight, T1-B, PVC, 1 m
Qty.	1 ST	
Type	IE-S1DS2VE0020T01T01-E	Version
Order No.	<a href="#">2725850020</a>	Patch cable, SPE plug (IEC 63171-2) - IP20 socket contact straight,
GTIN (EAN)	4050118825312	SPE plug (IEC 63171-2) - IP20 socket contact straight, T1-B, PVC, 2 m
Qty.	1 ST	
Type	IE-S1DS2VE0030T01T01-E	Version
Order No.	<a href="#">2725850030</a>	Patch cable, SPE plug (IEC 63171-2) - IP20 socket contact straight,
GTIN (EAN)	4050118825329	SPE plug (IEC 63171-2) - IP20 socket contact straight, T1-B, PVC, 3 m
Qty.	1 ST	
Type	IE-S1DS2VE0150T01T01-E	Version
Order No.	<a href="#">2725850150</a>	Patch cable, SPE plug (IEC 63171-2) - IP20 socket contact straight,
GTIN (EAN)	4064675364658	SPE plug (IEC 63171-2) - IP20 socket contact straight, T1-B, PVC, 15 m
Qty.	1 ST	
Type	IE-S1DS2VE0400T01T01-E	Version
Order No.	<a href="#">2725850400</a>	Patch cable, SPE plug (IEC 63171-2) - IP20 socket contact straight,
GTIN (EAN)	4064675364412	SPE plug (IEC 63171-2) - IP20 socket contact straight, T1-B, PVC, 40 m
Qty.	1 ST	

### AWG22



Single pair Ethernet is a technology that only requires one pair of wires to transmit data and power. The resulting benefits will make SPE the preferred network at the field level and beyond. Advantages of Single Pair Ethernet

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## Accessories

## General ordering data

Type	IE-S1DS2LE-100	Version
Order No.	<a href="#">2926120000</a>	System cable, Single Pair Ethernet (SPE), T1-B, LSZH, 100
GTIN (EAN)	4099986643253	
Qty.	1 ST	
Type	IE-S1DS2UE-100	Version
Order No.	<a href="#">2926110000</a>	System cable, Single Pair Ethernet (SPE), T1-B, PUR, 100
GTIN (EAN)	4099986643246	
Qty.	1 ST	
Type	IE-S1DS2UE-500	Version
Order No.	<a href="#">2924340000</a>	System cable, Single Pair Ethernet (SPE), T1-B, PUR, 500
GTIN (EAN)	4099986624573	
Qty.	1 ST	

## AWG26



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## General ordering data

Type	IE-S1ES2LE-100	Version
Order No.	<a href="#">2926140000</a>	System cable, Single Pair Ethernet (SPE), T1-B, LSZH, 100
GTIN (EAN)	4099986643277	
Qty.	1 ST	
Type	IE-S1ES2LE-500	Version
Order No.	<a href="#">2924370000</a>	System cable, Single Pair Ethernet (SPE), T1-B, LSZH, 500
GTIN (EAN)	4099986624818	
Qty.	1 ST	
Type	IE-S1ES2UE-100	Version
Order No.	<a href="#">2926130000</a>	System cable, Single Pair Ethernet (SPE), T1-B, PUR, 100
GTIN (EAN)	4099986643260	
Qty.	1 ST	
Type	IE-S1ES2UE-500	Version
Order No.	<a href="#">2924360000</a>	System cable, Single Pair Ethernet (SPE), T1-B, PUR, 500
GTIN (EAN)	4099986624801	
Qty.	1 ST	

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## Accessories

## Single Pair Ethernet tool-free



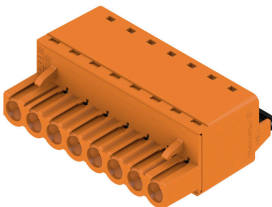
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## General ordering data

Type	IE-PS-SPO-S-FH-180	Version	
Order No.	<a href="#">2726040000</a>		SPE fieldattachable plug, SPE-Plug acc. to IEC 6317 1-2, IDC, 2-core,
GTIN (EAN)	4050118810790		IP20
Qty.	1 ST		

## BLF 5.08HC/180 SN



Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

## General ordering data

Type	BLF 5.08HC/02/180 SN BK...	Version	
Order No.	<a href="#">1013430000</a>		PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,
GTIN (EAN)	4032248721580		180°, PUSH IN with actuator, Clamping range, max. : 3.31 mm², Box
Qty.	180 ST		