IE-PCB-SPE-P-90V2.1-THR-YG/YG RL

SPElink®

RoHS COMPLIANT

Single Pair Ethernet PCB sockets

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

Version	PCB plug-in connector, SPE (Single Pair Ethernet), Clip-on flange, THT/THR solder connection, 1.80 mm, Number of poles: 2, 90°, Solder pin length (l): 2.1 mm, Ni/Au, black, Tape
Order No.	2795120000
Type	IE-PCB-SPE-P-90V2.1-THR-YG/YG RL
GTIN (EAN)	4064675119227
Qty.	100 items
Packaging	Tape
Delivery status	This article will no longer be available in the future.
Available until	2026-06-30T00:00:00+02:00
Alternative product	SPE P20 R1H 2.1 6 YG/YG TU

Creation date 08.03.2026 05:15:54 MEZ

IE-PCB-SPE-P-90V2.1-THR-YG/YG RL

Technical data

Approvals

Approvals	
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E316369

Dimensions and weights

Depth	19.9 mm	Depth (inches)	0.7835 inch
Height	10.9 mm	Height (inches)	0.4291 inch
Width	7.52 mm	Width (inches)	0.2961 inch
Net weight	5.93 g		

Temperatures

Installation temperature	

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

System specifications

Number of poles	2	LED	Yes
Solder pin length (l)	2.1 mm	Mounting onto the PCB	THT/THR solder connection
Pitch in inches (P)	0.071 "	Shielding material	CuSn
Shielding	Yes	Side termination, characteristic	Clip-on flange
Plugging force/pole, max.	3.5 N	Transmission rate	10/100 MBit/s, 1000 MBit/s, 10/100/1000 MBit/s
Pulling force/pole, max.	6.7 N	Type of connection	Solder connection
Category	T1-B	Pitch in mm (P)	1.80 mm
Protection degree	IP20	Plugging cycles	750
Outgoing elbow	90°	Shield surface	tinned
Performance-Category	T1-B 10/100 MBit/s, 1000 MBit/s, 10/100/1000 MBit/s	Soldering process	Reflow soldering, Manual soldering, Wave soldering
Plugging force/pole, min.	9.10 N	Pulling force / pole, min.	3.40 N
Solder pin dimensions	Octagonal	Tolerance of solder pin position	± 0.1 mm

System Parameters

Type of connection	Solder connection	Pitch in mm (P)	1.80 mm
Pitch in inches (P)	0.071 "	Number of poles	2
Pin series quantity	1	Protection degree	IP20
Plugging cycles	750	Plugging force/pole, max.	3.5 N
Pulling force/pole, max.	6.7 N		

Electrical properties

Dielectric strength, contact / shield	2250 V DC	Dielectric strength, contact / contact	1000 V DC
Insulation resistance	≥ 500 MΩ	Nominal voltage	72 V

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Catalogue status / Drawings

IE-PCB-SPE-P-90V2.1-THR-YG/YG RL

Technical data

Rated current	4 A	PoE / PoE+	PoDL acc. to IEEE 802.3bu / cg

Standards

Connector standard	IEC 63171-2		

Material data

Insulating material	LCP	Colour	black
Colour chart (similar)	RAL 9011	Insulation resistance	≥ 500 MΩ
Moisture Level (MSL)	1	UL 94 flammability rating	V-0
Contact base material	CuMg	Contact material	Cu-alloy
Contact surface	Ni/Au	Layer structure of solder connection	2...4 µm Ni / ≥ 0.25 µm Au
Operating temperature, min.	-40 °C	Operating temperature, max.	85 °C

Rated data acc. to UL 1059

Institute (cURus)	CURUS	Certificate No. (cURus)	E316369
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Tape	VPE length	459.00 mm
VPE width	365.00 mm	VPE height	61.00 mm

Material data

UL 94 flammability rating	V-0	Insulating material	LCP

General data

Colour	black	Protection degree	IP20
Colour chart (similar)	RAL 9011		

Important note

Notes	

Classifications

ETIM 8.0	EC002637	ETIM 9.0	EC002637
ETIM 10.0	EC002637	ECLASS 14.0	27-46-02-01
ECLASS 15.0	27-46-02-01		

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Drawings
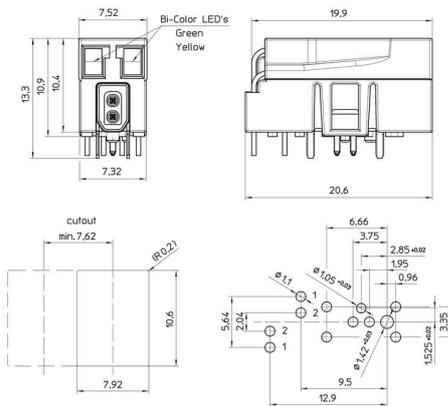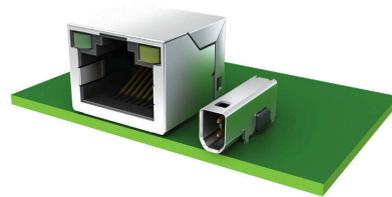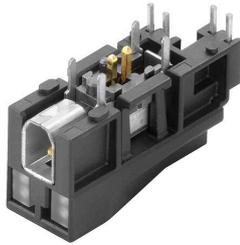
Pin assignment

Pair	Contacts	Data
1	1	RX/TX+
	2	RX/TX–

	effective length
Contact 1	11.3
Contact 2	15

LED Polarity

Green
2 — 1
Yellow

LED- Specifications

Bi-Color LED		Forward Voltage (Max)	*Forward Voltage (Typ)	Wavelength
Green/Yellow	Green	2,6 V	2,2 V	570 nm
	Yellow	2,6 V	2,1 V	590 nm

* With a forward current of 20 mA (Typ)

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Drawings

Pin assignment

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Green/Yellow	Green	2,6 V	2,2 V	570 nm
	Yellow	2,6 V	2,1 V	590 nm

* With a forward current of 20 mA (Typ)

cutout

IE-PCB-SPE-P-90V2.1-THR-YG/YG RL

Counterpart

IP20 Patch Cable

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General ordering data

Type	IE-S1DS2VE0010T01T01-E	Version
Order No.	2725850010	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.	2725850020	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.	2725850030	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-S1DS2VE0050T01T01-E	Version
Order No.	2725850050	Patch cable, SPE plug (IEC 63171-2) - IP20 socket contact straight,
GTIN (EAN)	4050118825336	SPE plug (IEC 63171-2) - IP20 socket contact straight, T1-B, PVC, 5 m
Qty.	1 ST	