IE-S1DS2VE0020T01T01-E

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com



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	Patch cable, SPE plug (IEC 63171-2) - IP20 female straight, SPE plug (IEC 63171-2) - IP20 female straight, PVC, 2 m
Order No.	2725850020
Type	IE-S1DS2VE0020T01T01-E
GTIN (EAN)	4050118825312
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Length	2 m	Length (inches)	78.74 inch
Net weight	0.077 g		

Temperatures

Operating temperature	-40 °C...80 °C

Electrical properties

Dielectric strength, contact / contact	1000 V DC	Dielectric strength, contact / shield	2250 V DC
PoE / PoE+	PoDL acc. to IEEE 802.3bu / cg		

General standards

Application-specific communication cable facilities	ISO/IEC 11801-1 Amd.1, ISO/IEC 11801-3 Amd.1, ISO/IEC 11801-6 Amd.1	Connector standard	IEC 63171-2

Standards

Connector standard	IEC 63171-2

Cable structure

Colour coding	white / blue	Complete shielding	Shielding braid made from copper wiring
Cross-section	2*AWG 22	Insulation	PE
Insulation diameter 2	1.65 mm	Material sheath	PVC
Number of wires	2	Overlap of shielding braid	80 %
Sheath diameter, max.	5.3 mm	Sheath diameter, min.	4.9 mm
Sheathing colour	black	Shielding	STP
Strands	7		

Electrical properties of cable

Capacity at 800 Hz	1.6 nF/km	Characteristic impedance	100 ± 15 Ω at 20 MHz
Coupling attenuation 1 to 600 MHz	Type I	Rated current	3.5 A
Rated voltage (DC)	60 V	Resistance differential	2 %
Test voltage: wire-wire-shield	1 kV DC, 1 min	Transmission rate	10/100 MBit/s, 1000 Mbit/s, 1000 MBit/s

Mechanical and material properties of cable

Bending radius	20 mm	Colour	black
Halogen	Yes	Resistance to oils	IRM 902/903 oil resistance test at (70°Cx4h)
Resistance to spread of flame	FT1	UV-resistant	Complies with UL 1581 Sec. 1200

Plug, left

Connector left	SPE plug (IEC 63171-2) - IP20 female straight

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Technical data

Plug, right

Connector right	SPE plug (IEC 63171-2) - IP20 female straight	Housing main material	Elastollan

plug

Connector left	SPE plug (IEC 63171-2) - IP20 female straight	Connector right	SPE plug (IEC 63171-2) - IP20 female straight

Classifications

ETIM 6.0	EC002599	ETIM 7.0	EC002599
ECLASS 9.0	27-06-03-08	ECLASS 9.1	27-06-03-08
ECLASS 10.0	27-06-03-08	ECLASS 11.0	27-06-03-08

Approvals

Approvals

Downloads

Engineering Data	STEP
Brochure/Catalogue	Catalogues in PDF-format

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Drawings

Detailed drawing



Dimensional drawing



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Mating connector (fully pluggable)

Single-Pair-Ethernet



Single Pair Ethernet PCB sockets
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General ordering data

Type	IE-PCB-SP0-P-90V-THR-YG ...	Version	Packaging
Order No.	2795120000	PCB plug-in connector, male header, Clip-on flange, THT/THR solder	Tape
GTIN (EAN)	4064675119227	connection, 1.80 mm, Number of poles: 2, 90°, Solder pin length (l):	
Qty.	100 pc(s).	2.1 mm, Ni/Au, black, Tape	
Type	IE-PCB-SP0-P-180V-THR	Version	Packaging
Order No.	2795170000	PCB plug-in connector, male header, Clip-on flange, THT/THR solder	Tape
GTIN (EAN)	4064675119265	connection, 1.80 mm, Number of poles: 2, 180°, Solder pin length (l):	
Qty.	100 pc(s).	2.1 mm, Ni/Au, silver, black, Tape	
Type	IE-PCB-SP0-P-90V-THR	Version	Packaging
Order No.	2726010000	PCB plug-in connector, male header, Clip-on flange, THT/THR solder	Tape
GTIN (EAN)	4050118810769	connection, 1.80 mm, Number of poles: 2, 90°, Solder pin length (l):	
Qty.	100 pc(s).	2.1 mm, Ni/Au, silver, black, Tape	