



# SINGLE PAIR ETHERNET (SPE) M8 HYBRID BOARD RECEPTACLE IP67 AND SINGLE PAIR ETHERNET (SPE) M8 HYBRID CORDSET IP67

Single Pair Ethernet (SPE) allows for a single open, scalable Ethernet-based network within the automation system. It standardizes the transmission of Ethernet over only one pair of copper wires. In addition to data transmission via SPE, the M8 Hybrid solution also provides power transmission over a separate wire pair. Data transmission is possible up to 1 Gb/s, and power supply up to 400W. At 10 Mb/s speed transmission distances up to 1,000 meters are possible.

## BENEFITS

- Reduce number of connectors needed
- Enables IoT in small package
- Higher power levels possible
- Galvanic separation power and data
- More noise allowed on power lines
- No special circuitry required
- More flexibility for powering devices

## KEY FEATURE

- Data and power in one cable
- 1 Gb/s communication
- Higher power levels are possible compared to PoDL
- IEC 6317-6 standard supported

# Single Pair Ethernet (SPE) M8 Hybrid Board Receptacle IP67 and Single Pair Ethernet (SPE) M8 Hybrid Cordset IP67

## APPLICATIONS

- Sensor/Actuator network
- Robotics
- Machinery
- Industrial automation
- Security and surveillance cameras

## ELECTRICAL

- Current over signal pair up to 4A (22 AWG)
- Current over power pair up to 8A (18 AWG)
- SPE 1 Gbps / 40m per IEEE 802.3bp 1000BASE-T1
- SPE 10Mb/s / 1000m per IEEE 802.3cg 10BASE-T1

## MECHANICAL

- Separate data and power contacts

## MATERIALS

- Coupling nuts: nickel plated brass
- contact material: phosphor bronze
- plastics: UL94-V0 rated, black
- Free of halogen, silicone, teflon and release agents

## STANDARDS

- IEC 63171-6
- RoHS, China-RoHS
- REACH

## PART NUMBER LIST

Part Number	Part Description
<a href="#">TB1141D4722-001</a>	SPE T1 M8 Hybrid IP67 cable assembly, male straight, single end, cable length 0.5m
<a href="#">TB1141D4722-002</a>	SPE T1 M8 Hybrid IP67 cable assembly, male straight, single end, cable length 1m
<a href="#">TB1141D4722-004</a>	SPE T1 M8 Hybrid IP67 cable assembly, male straight, single end, cable length 3m
<a href="#">TB1141D4722-005</a>	SPE T1 M8 Hybrid IP67 cable assembly, male straight, single end, cable length 5m
<a href="#">TB1141D4722-007</a>	SPE T1 M8 Hybrid IP67 cable assembly, male straight, single end, cable length 10m
<a href="#">TB1141D4722-150</a>	SPE T1 M8 Hybrid IP67 cable assembly, male straight, single end, cable length 15m
<a href="#">TB1141D4722-400</a>	SPE T1 M8 Hybrid IP67 cable assembly, male straight, single end, cable length 40m
<a href="#">TB1147D4722-004</a>	SPE T1 M8 Hybrid IP67 cable assembly, male straight, double end, cable length 3m
<a href="#">TB1147D4722-005</a>	SPE T1 M8 Hybrid IP67 cable assembly, male straight, double end, cable length 5m
<a href="#">TB1147D4722-007</a>	SPE T1 M8 Hybrid IP67 cable assembly, male straight, double end, cable length 10m
<a href="#">TB1147D4722-150</a>	SPE T1 M8 Hybrid IP67 cable assembly, male straight, double end, cable length 15m
<a href="#">TB1147D4722-400</a>	SPE T1 M8 Hybrid IP67 cable assembly, male straight, double end, cable length 40m
<a href="#">TB114CD4722-001</a>	SPE T1 M8 Hybrid IP67 cable assembly, female straight, double end, cable length 0.5m
<a href="#">TB114CD4722-002</a>	SPE T1 M8 Hybrid IP67 cable assembly, female straight, double end, cable length 1m
<a href="#">TB114CD4722-004</a>	SPE T1 M8 Hybrid IP67 cable assembly, female straight, double end, cable length 3m
<a href="#">TB114CD4722-005</a>	SPE T1 M8 Hybrid IP67 cable assembly, female straight, double end, cable length 5m
<a href="#">TB114CD4722-007</a>	SPE T1 M8 Hybrid IP67 cable assembly, female straight, double end, cable length 10m
<a href="#">TB114CD4722-150</a>	SPE T1 M8 Hybrid IP67 cable assembly, female straight, double end, cable length 15m
<a href="#">TB114CD4722-400</a>	SPE T1 M8 Hybrid IP67 cable assembly, female straight, double end 40m
<a href="#">T4040110044-000</a>	SPE T1 M8 Hybrid IP67 rear panel mount, female, PCB solder, shielded

# Single Pair Ethernet (SPE) M8 Hybrid Board Receptacle IP67 and Single Pair Ethernet (SPE) M8 Hybrid Cordset IP67

## PART NUMBER LIST

Part Number	Part Description
<a href="#">TB1143D4722-001</a>	SPE T1 M8 Hybrid IP67 cable assembly, female straight, Single end 0.5m
<a href="#">TB1143D4722-002</a>	SPE T1 M8 Hybrid IP67 cable assembly, female straight, Single end 1m
<a href="#">TB1143D4722-004</a>	SPE T1 M8 Hybrid IP67 cable assembly, female straight, Single end 3m
<a href="#">TB1143D4722-005</a>	SPE T1 M8 Hybrid IP67 cable assembly, female straight, Single end 5m
<a href="#">TB1143D4722-007</a>	SPE T1 M8 Hybrid IP67 cable assembly, female straight, Single end 10m
<a href="#">TB1143D4722-150</a>	SPE T1 M8 Hybrid IP67 cable assembly, female straight, Single end 15m
<a href="#">TB1143D4722-400</a>	SPE T1 M8 Hybrid IP67 cable assembly, female straight, Single end 40m

## te.com

© 2023 TE Connectivity. All Rights Reserved.

TE Connectivity, TE connectivity (logo) and Every Connection Counts are trademarks owned or licensed by TE Connectivity. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

04/23 AK