



# 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

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