



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 63171-6 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
TB1141D4722-001	SPE T1 M8 Hybrid IP67 cable assembly, male straight, single end, cable length 0.5 m
TB1141D4722-002	SPE T1 M8 Hybrid IP67 cable assembly, male straight, single end, cable length 1 m
TB1141D4722-004	SPE T1 M8 Hybrid IP67 cable assembly, male straight, single end, cable length 3 m
TB1141D4722-005	SPE T1 M8 Hybrid IP67 cable assembly, male straight, single end, cable length 5 m
TB1141D4722-007	SPE T1 M8 Hybrid IP67 cable assembly, male straight, single end, cable length 10 m
TB1141D4722-150	SPE T1 M8 Hybrid IP67 cable assembly, male straight, single end, cable length 15 m
TB1141D4722-400	SPE T1 M8 Hybrid IP67 cable assembly, male straight, single end, cable length 40 m
TB1147D4722-004	SPE T1 M8 Hybrid IP67 cable assembly, male straight, double end, cable length 3 m
TB1147D4722-005	SPE T1 M8 Hybrid IP67 cable assembly, male straight, double end, cable length 5 m
TB1147D4722-007	SPE T1 M8 Hybrid IP67 cable assembly, male straight, double end, cable length 10 m
TB1147D4722-150	SPE T1 M8 Hybrid IP67 cable assembly, male straight, double end, cable length 15 m
TB1147D4722-400	SPE T1 M8 Hybrid IP67 cable assembly, male straight, double end, cable length 40 m
TB114CD4722-001	SPE T1 M8 Hybrid IP67 cable assembly, male female straight, double end, cable length, 0.5 m
TB114CD4722-002	SPE T1 M8 Hybrid IP67 cable assembly, male female straight, double end, cable length, 1 m
TB114CD4722-004	SPE T1 M8 Hybrid IP67 cable assembly, male female straight, double end, cable length, 3 m
TB114CD4722-005	SPE T1 M8 Hybrid IP67 cable assembly, male female straight, double end, cable length, 5 m
TB114CD4722-007	SPE T1 M8 Hybrid IP67 cable assembly, male female straight, double end, cable length, 10 m
TB114CD4722-150	SPE T1 M8 Hybrid IP67 cable assembly, male female straight, double end, cable length, 15 m
TB114CD4722-400	SPE T1 M8 Hybrid IP67 cable assembly, male female straight, double end, 40 m
T4040110044-000	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
TB1143D4722-001	SPE T1 M8 Hybrid IP67 cable assembly, female straight, single end 0.5 m
TB1143D4722-002	SPE T1 M8 Hybrid IP67 cable assembly, female straight, single end 1 m
TB1143D4722-004	SPE T1 M8 Hybrid IP67 cable assembly, female straight, single end 3 m
TB1143D4722-005	SPE T1 M8 Hybrid IP67 cable assembly, female straight, single end 5 m
TB1143D4722-007	SPE T1 M8 Hybrid IP67 cable assembly, female straight, single end 10 m
TB1143D4722-150	SPE T1 M8 Hybrid IP67 cable assembly, female straight, single end 15 m
TB1143D4722-400	SPE T1 M8 Hybrid IP67 cable assembly, female straight, single end 40 m
T4041110044-000	SPE T1 M8 Hybrid IP67 rear panel mount, male, PCB solder, shielded

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