

Amphenol



SPE M8 Hybrid Connector

Connectors and Accessories

Enabling IIOT

Amphenol SPE M8 Hybrid

SPE M8 Hybrid integrate power and Ethernet signal in single one cable, adopt daisy-chaining and star structure to power more devices with less switch ports. It can work under M313C3E3 extreme industrial and out door environment with IP67 water proof, meet IEC 63171-6 criterion. Targeted for high power and high speed Ethernet signal demand industrial equipment and smart building with advantages of light weight high environmental resistance and cost effective.

Features/Advantages

- Separate power pair adopt daisy-chaining and star structure, power more devices with less switch ports
- Higher power up to 400W vs 50W (PoDL)
- Industrial hash environment: M313C3E3 with IP67
- Most compact size of M8 interface
- Fully shield 360°

Specification

- Impedence 100Ω
- Rated voltage 60V DC
- Data pair (AWG22-AWG24), current 1.5 A
- Power pair (AWG18), current 8 A
- 200W @24V DC, 400W @48V DC
- High data-rate: ~1Gbps @600M bandwidth
- 40m distance with 1Gbps (1000Base-T1)



Protocol & Network Structure Compatibility

Use Model	SPE Protocol	Power System	Network Structure	Data Rate	Min. Distance	Typical Applications	Benefit
Model 1	10BASE-T1S	Hybrid Signal & Power	Point to Point	10 MBit/s	15m	Sensor or Actuator	No need discrete power supply unit and circuit
			Switch Line or Star Structure (8 Max)		25m		
Model 2	10BASE-T1L	PoDL	Point to Point	10 MBit/s	1000m	Processing Industry, Instrument	Save cable cost
Model 3	100BASE-T1 or 1000BASE-T1	PoDL	Point to Point	100 MBit/s	40m	Intelligent Edge Devices\Smart Building	No need discrete power supply unit and cable
Model 4	100BASE-T1 or 1000BASE-T1	Hybrid Signal & Power	Switch Line or Star Structure (8 Max)	1 GBit/s	40m	High Speed Edge Devices	High speed, no need discrete power supply unit and circuit

Targeted Applications: High power edge device



Automation



Machine Vision



Edge Device



Instrumentation

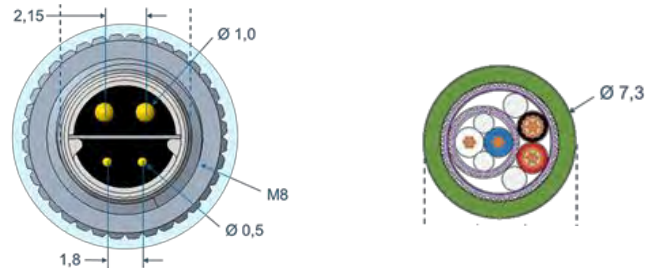


RSU




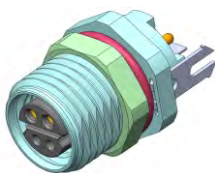
Smart Building

Connector Interface and Cable



Preferred Cable Parameter		
Category	Wire Cross Section	Cable Diameter
Data	AWG 24~22	7.5mm Max.
Power	AWG 18	

How to Order

M8 Hybrid Portfolio	Description	Amphenol PN
	Straight Male Plug, SPE M8 Hybrid	10-780651-M84
	Vertical Female Receptacle, SPE M8 Hybrid	10-780650-M84