

# 3<sup>3</sup> Single Pair Ethernet

*Freedom of Choices and Budgets*

**Amphenol**  
INDUSTRIAL PRODUCTS GROUP

**Amphenol LTW**  
Unrivaled InterConnects for Harsh Environments

- 3** Mechanical Interfaces IP67 and above for industrial and ruggedized applications
- 3** Freedom of choices for your needs and requirements
- 3** Budgets, pay for what you need

# What is Single Pair Ethernet?

## MPE VS SPE

MPE means Multi Pair Ethernet, which utilizes two or four wire pairs.

	SPEED	DIRECTION	DATA RATE
FAST ETHERNET	100 Mbit/s per twisted pair	unidirectional	100BASE-TX
GBIT ETHERNET	250 Mbit/s or 2.5 Gbit/s per twisted pair	bi-directional	1GBase-T or 10GBase-T
SINGLE PAIR ETHERNET	100 Mbit/s or 1Gbit/s per twisted pair	bi-directional	100BASE-T1 or 1000BASE-T1

1. Single Pair Ethernet (SPE) Cables **simplify** the process of **connecting** and **powering** edge devices by extending the range and bandwidth of a single twisted pair.
2. SPE cables allow **stable, uninterrupted** connectivity from remote field devices to the cloud, even in the **roughest situations**, thanks to excellent shielding and jacketing choices.
3. With the ability to integrate data and power delivery with Power over Data Line (PoDL), you can benefit from **increased uptime, process efficiency, and operational benefits**.



ALTW's "**3<sup>3</sup> SPE**" mechanical interfaces are all designed and made according to IEEE 802.3bp standard offering three mechanical mating interfaces all IP67 up and above giving you the freedom to choose the interconnects suitable to your needs and requirements for industrial and ruggedized applications.





M12 SPE (Screw & Push-Pull)



FLOS+ SPE (Push-Pull)



X-Lok SPE (Push-Lock)

## Features

- » ALTW's Proprietary SPE Interface Integrated in **M12** (Screw Threaded & Push-Pull) / **FLOS+** (Push-Pull) / **X-Lok** (Push-Lock)
- » Providing Low Power & Simply Networking On End-point Sensors
- » Cost-Effective, Smaller & Lighter Than Standard 4 Pairs Ethernet Cable
- » Compatible 802.3 10/100/1000 Base-T1 Data Rates As Existing Technologies \*\*
- » Receptacle IP67 **UNMATED** Waterproof, Also Available In Double Ended And Field Installable
- » Vibration Resistance 20g (10 ~ 2,000 Hz)
- » Supports PoDL (Power Over Data Lines)



Video

\*\* 24~26 AWG Standard Length 15m



**33** Single Pair Ethernet  
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## Contact Us



Luc Kan | Sales & Marketing  
Email: [luc@ltw-tech.com](mailto:luc@ltw-tech.com)

Customer Service  
Email: [sales@ltw-tech.com](mailto:sales@ltw-tech.com)

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