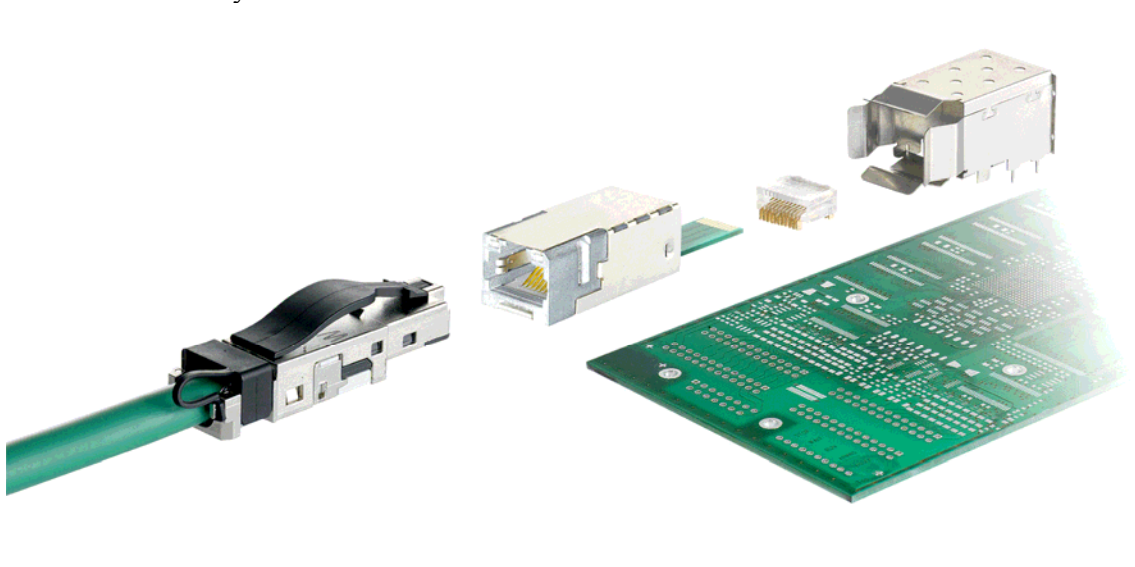


X|Synergy: A compilation of Industrial Ethernet connection systems.

X|Synergy is an evolution in the area of Ethernet connectivity. Unlike traditional office settings, Ethernet switches, routers and even WLAN have spread into environments where protection from noise, solids, liquids, and even gases is of concern. **X|Synergy** provides protection from all these sources of interference in the form of a robust industrial grade RJ45 based connection system.



Edge Connector:

Rather than having to solder the jack directly to the PC board, the **X|Synergy** connection system utilizes edge connector technology. The edge connector is a SMD which allows the jack to become part of the installation process, while provided self-alignment and flexibility. There are jack modules to support both 10/100 Mbps and gigabit Ethernet applications. The jack modules simply plug into the edge connector which resides on the PCB, and is shrouded by a metal shield for enhanced EMI protection. This unique approach ensures signal integrity is maintained, as proper alignment is inherently guaranteed.

Variety of plug variants and inserts:

There are four different plug housings available, of which one (Variant 1) comes in both plastic and metal forms. Variant 4 is a push-pull plastic housing which allows for quick insertion onto the mating bulkhead, and is standardized according to IEC 61076-3-106. Variant 14 is a more robust version made of metal, and incorporating a locking latch. Approved as per IEC/PAS 61076-3-117, this connection variant complies with the special requirements of AIDA (automation Initiative of the German automotive manufacturers) and of PROFINET.

Optical Compatibility (OpDAT):

X|Synergy offers further flexibility in that SFP optical transceivers can also be integrated into the connection system. Available in both SC and LC forms, the OpDAT plug inserts can be used with the Variant 4 housings to facilitate a fully push-pull IP-67 optical connection system when used with the associated adapter inserts.

X|Synergy: Additional Features and Benefits

Edge Connector: RJ45 jack modules are designed with PCB extensions which make them equal in length to that of standard SFP Optical transceivers. This allows both technologies to coexist in the same system.

PoE Enabled: Modules have integrated magnetics to facilitate PoE. No need for discrete components.

Optimized board layout: Minimized trace length helps reduce mismatch and maintain signal integrity.

Mechanical Decoupling: Mechanical forces associated with engaging and disengaging the housings are transferred into the chassis via the bulkheads. This eliminates strain on the PCB, and ensures a robust and reliable electrical interface cycle after cycle.



Five port Ethernet switch with variant 1 metal plug housings and bulkheads, with plastic cap for unused port.

With **X|Synergy**, METZ CONNECT offers a reliable Ethernet connection system capable of providing ingress protection up to IP67. For use in areas such as the automotive industry, traffic control, railway, medical and telecommunication, **X|Synergy** facilitates a robust, tool-less, self-aligning interface which reigns supreme in harsh environments.

For ordering information and samples, contact RIA Connect, Inc.