

Molex's XPAK Pluggable Copper Transceiver meets broad market demands for high-speed

interconnects for distances up to 15 meters

Molex's XPAK copper transceiver is designed for high-speed, 10 Gigabit Ethernet applications. The transceiver design is based on a 3.125 Gbps XAUI (10 Gigabit Attachment Unit Interface) to XAUI re-timer, with transmit pre-emphasis and receive equalization. This design ensures the signal can be boosted to compensate for signal loss at high frequencies. Preemphasis is achieved by boosting the high-frequency content of a transmitted signal or attenuating lowfrequency content to compensate for high-frequency loss in the cable assembly. Receiver equalization is a similar process applied to the receiver. The re-timer also incorporates clock and data recovery as well as XAUI lane alignment.

The Molex XPAK transceiver utilizes an industry standard 10Gbase CX4 cable interface (LaneLink™ series 74526) and combines with the XPAK Electro Magnetic Interference (EMI) guide rail (Z-Axis Pluggable series 74732) and 70-circuit XPAK connector (Molex Part 74441-0013) for a total system solution. The Molex pluggable 10 Gbps transceiver meets Gigabit Ethernet standards IEEE 802.3ak for CX4 and IEEE 802.3ae for XAUI.

Features and Benefits

- Transmits 10 Gbps data up to 15 meters over Copper (Cu) cable enabling high-speed data transmission
- Hot-swappable design enables transceiver to be removed or installed without powering-down



For more information on Molex's extensive XPAK product offering, please visit: www.molex.com/ product/xpak.

- Zinc diecast backshells provide 360° Electro Magnetic Interference (EMI) shielding
- Designed to meet Gigabit Ethernet standards IEEE 802.3ak for CX4 and IEEE 802.3ae for XAUI for compliance with XPAK MSA

SPECIFICATIONS

Reference Information

Packaging: Static resistant bag and box Mates with: Host Connector (Series 74441), CX4 Cable Assembly (Series 74526) Use with: XPAK Rail (Order No. 74732-0220) Designed In: Millimeters

Electrical

Voltage: 3.3V at 567mA, 1.5V at 1554mA Current: 3.3V at 567mA, 1.5V at 1554mA

Mechanical

Mating Force: Min.: 20N (4.5 lbf) Max.: 40N (9 lbf), 80N (18 lbf) max. allowed by MSA Unmating Force: Min.: 8N (1.79 lbf) Max.: 35N (7.9 lbf) Durability: 100 cycles

Physical

Housing: Zinc (Zn) Housing Plating: Nickel (Ni) PCB Contact: 0.76µm (30µ″) Gold (Au) PCB Thickness: 1.00mm (.393″) +/- 0.10mm (.004″) Operating Temperature: -40 to +85° C

APPLICATIONS

- Telecommunication
 - Hubs
 - Servers
 - Routers
- Data Communication
- Storage Area Network
- Industry Standards XPAK MSA

 - IEEE 802.3ak CX4
 - IEEE 802.3ae XAUI





ORDERING INFORMATION

Order No.	Description
74739-0001	XPAK Transceiver