

High speed couplers

For IEEE802.3af/at Power Over Ethernet(POE) applications.

POE(IEEE802.3af/at) technology is a simple solution to supply both of power(15W max., 48VDC) and data(10kHz-5MHz) via a standard 10/100Mbps Ethernet CAT5 cable in many kinds of networking applications from industrial IT to home/office such as IP phone, wireless LAN system, IP camera. The end devices are powered up without any extra charger/adopter.

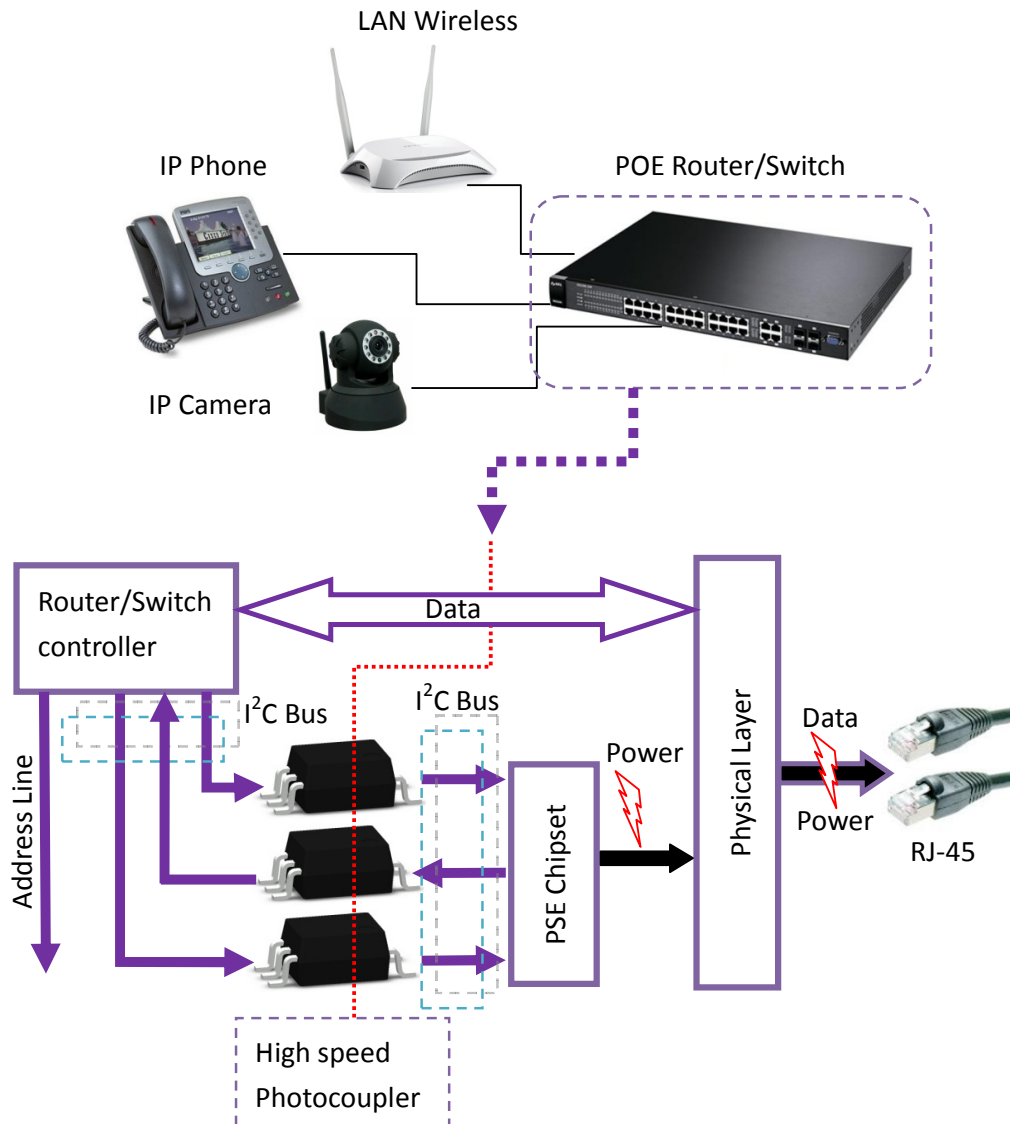
LITE-ON Technology™ offers high speed photocoupler series to support POE applications. This product family encompasses from 1MBd to 15MBd in DIP8(Dual-In Line), SOP5, SOP8 plastic packages. These photocouplers build in the latest IC technology to perform outstanding power consumption, data transfer rate in both of transistor and digital output devices. LITEON's new 3.3V/5V LVTTTL/LVCOMS compatible digital photocouplers are packaged in double mold plastic package features high CMTI up to minimum 10kV/μs($V_{CM}=1kV$), minimum 3000V_{AC} isolation capability. The 10MBd/15MBd 3.3V digital high speed couplers are ideal for POE/PSE(Power Source Equipment) with I²C Bus all frequencies applications.

Selection Guide

Speed (Typ.)	Package	Device (Single/Dual)	I ² C Bus speed mode
1MBd	SOP5	LTV-M501	Standard Mode 100kHz
	SOP8	LTV-0501 / 053L*	Fast Speed Mode 400kHz
	DIP8	6N135&136	
	LSOP6*	LTV-50LW*	
10MBd	SOP5	LTV-M601	Standard Mode 100kHz
	SOP8	LTV-0601 / 063L*	Fast Speed Mode 400kHz
	DIP8	6N137	High Speed Mode 3.4MHz
	LSOP6*	LTV-60LW*	
15MBd	SOP8	LTV-071L* / 074L*	Standard Mode 100kHz
	LSOP6*	LTV-70LW*	Fast Speed Mode 400kHz High Speed Mode 3.4MHz Ultra Fast Mode 5MHz

*. Product will be released in 2014 onward.

POE APPLICATIONS



LITEON Photocoupler features for customer:

- ✓ High speed: 1MBd~15MBd typical
- ✓ Common Mode Transient Immunity(CMTI): 10kV/μs(V_{CM}=1kV)
- ✓ Low power consumption 3.3V/5V available
- ✓ LVTTTL/LVCOMS compatible
- ✓ DIP8 / SOP8 / SOP5 / LSOP6 package available
- ✓ Safety certificates: UL/cUL/VDE DIN EN60747-5-5
- ✓ Reduce PCB space, cost saving