

November 2007



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### Ordering Information

ZL60209MJDA, UTP-to-fiber converter  
 ZL60210MJDA, UTP-to-fiber converter  
 with wall mount

**0°C to +70°C**

- TX: 850 nm, RX: 1300 nm
- FCC Part 15, Class A and CE Certification



The part is compliant to the EU directive 2002/95/EC issued 27 January 2003 [RoHS].

A full "Data Sheet" is available to qualified customers. To register, please send an email to [bertil.kronlund@zarlink.com](mailto:bertil.kronlund@zarlink.com).

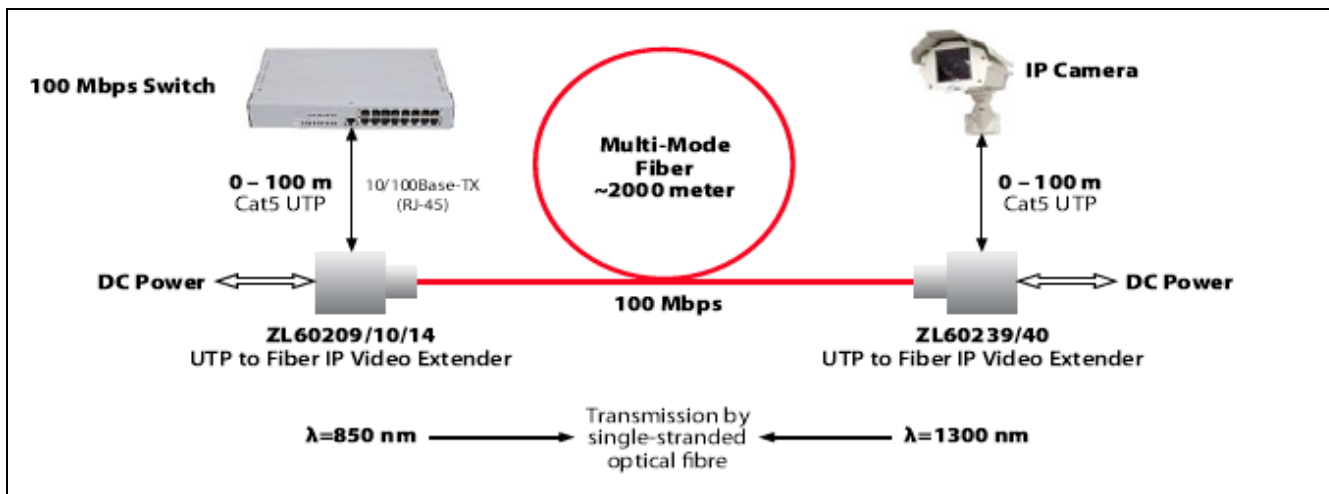
### Features

- Full duplex communication over single-stranded multi-mode fiber
- Transmission distance: Ethernet up to 100 m, multi-mode fiber up to 2 km
- Compact size: 41.5 x 61.5 x 28.3 mm
- Power 5-12V DC and low power consumption 2 W
- One single ST Fiber connector for 100Base-FX fiber cable

### Applications

- 10/100 Mbps extended LAN distances between:
  - LAN and local IP surveillance cameras
  - LAN and local access points for wireless IP cameras
  - Remote switches and IP cameras
  - Remote switches and access points for IP cameras

**Note:** The module should be used together with ZL60239 or ZL60240 for link operation.



**Figure 1 - Typical Video IP Surveillance Solution**

## Description

The ZL60209 and ZL60210 video IP surveillance camera cable extender module is a fully integrated device designed for direct connection between two types of media: 10/100Base-TX STP/UTP (Fast Ethernet on shielded/unshielded twisted pair copper cables) and 100Base-FX (Fast Ethernet on multi-mode fiber) with single fiber, to extend the network reach up to 2 km.

Based on Zarlink's world class family of high-performance LEDs, VCSELs and PINs the links have been optimized to offer excellent optical coupling efficiency in combination with high bandwidth operation and extremely good reliability.

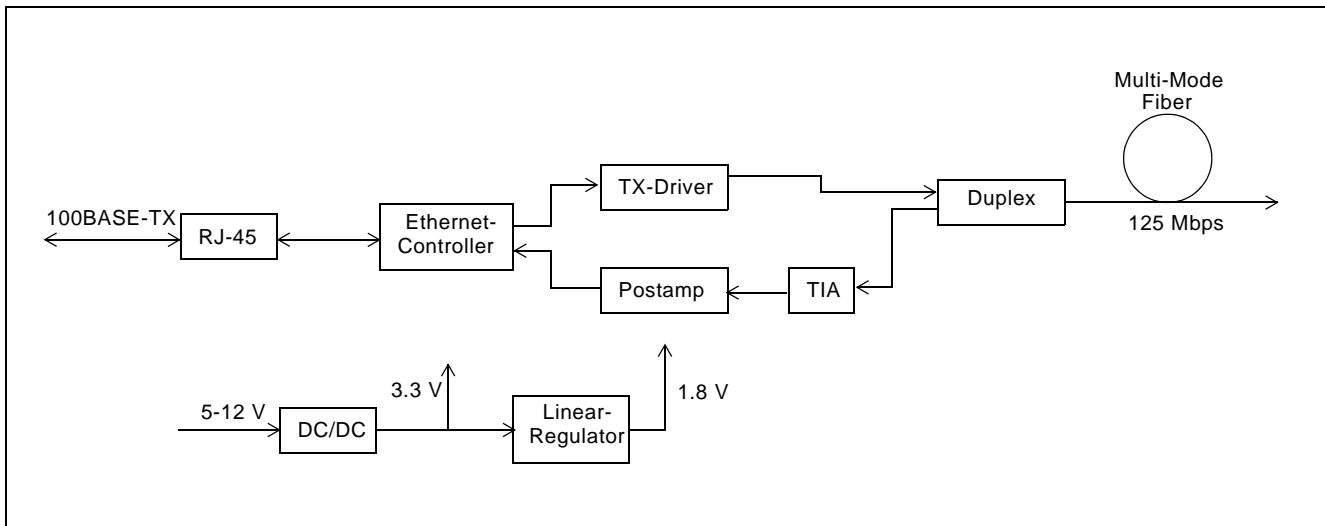
The optical component of the modules uses dichronic beamsplitters for maximum optical power budget and minimum crosstalk. Minimum internal crosstalk is achieved by the use of wavelength-selective detectors.

The modules are designed for multi-mode fiber and optimized for 62.5/125  $\mu\text{m}$  fiber.

The link offers attractive advantages in terms of size, weight and flexibility that allow the device to be attached directly to the copper cable and fit inside the outdoor protective housing of the IP camera.

The module has power consumption below 2.2 W over the entire temperature range.

The part is compliant to the EU directive 2002/95/EC issued 27 January 2003 [RoHS] with exception number 6.



**Figure 2 - Simplified Block Diagram**



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