# UT-1310 Gigabit Triple-Speed Converter

10/100/1000 to 1000SX/LX (SFP) Converter

## *Product Introduction & Benefits*


The **UT-1310** media converter is specifically designed to offer fiber advantages for mission-critical networks like Telco/ISP backbones, cable operators, banking and enterprise networks. The **UT-1310** can reduce network downtime and increase Quality of Service levels. The converters are completely transparent when installed, so the network performs exactly the way it would do normally – only now, it can incorporate both copper and fiber mediums.

This flexibility in cabling allows network managers to put fiber cables anywhere within a network without changing the arrangement of the copper-based Gigabit segments. Their compact size allows the converters to be wall-mounted to save space. Several converters can be simultaneously installed by using the UT-3004 4-slot and UT-3012 12-slot, 19" rack-mountable chasses.

The **UT-1310** takes advantage of intelligent connection technology to support Auto-negotiation, thereby eliminating the hassle of manually configuring or monitoring settings. This ensures plug-n-play operability.

## *Main Features:*

**Standards:**

Complies with IEEE 10/100Base-TX, IEEE 802.3ab 1000Base-T and IEEE 802.3z 1000Base-SX/LX standards

**Interface:**

One 10/100/1000 Mbps Ethernet port

Auto MDI/MDI-X support on RJ-45 port

One SFP slot for Gigabit links

Extends distances up to 220m for multi-mode SX (110km with long-haul single-mode) under full-duplex mode

**Management:**

Alarm LED illuminates to indicate link failure

Status LEDs for easy monitoring of device's status

**Mechanical & Environmental:**

External power supply

Chassis-compliant (internal power supply)

FCC Class A & CE approved

FCC Class A CE Approval Chassis Compliant

# UT-1312 Gigabit Redundant-link Converter

10/100/1000 to 2-slot 1000SX/LX (SFP) Converter

## *Product Introduction & Benefits*


The **UT-1312** media converter is specifically designed to offer high-speed recovery (<10ms) and fiber advantages for mission-critical networks like Telco/ISP backbones, cable operators, banking and enterprise networks. The **UT-1312** can minimize network downtime and increase Quality of Service levels. The converters are completely transparent when installed, so the network performs exactly the way it would do normally – only now, it can incorporate both copper and fiber mediums.

This flexibility in cabling allows network managers to put fiber cables anywhere within a network without changing the arrangement of the copper-based Gigabit segments. Their compact size allows the converters to be wall-mounted to save space. Several converters can be simultaneously installed by using the UT-3004 4-slot or UT-3012 12-slot, 19" rack-mountable chasses.

The **UT-1312** takes advantage of intelligent connection technology to support Auto-negotiation, thereby eliminating the hassle of manually configuring or monitoring settings. This ensures plug-n-play operability.

## *Main Features:*

**Standards:**

Complies with IEEE 10/100Base-TX, IEEE 802.3ab 1000Base-T and IEEE 802.3z 1000Base-SX/LX standards

**Interface:**

One 10/100/1000 Mbps Ethernet port

Supports Auto MDI/MDI-X on RJ-45 port

Two SFP slots for Gigabit links

Extends distances up to 220m for multi-mode SX (110km with long-haul single-mode) under full duplex mode

**Redundancy:**

Fail-over on dual fiber links

Issuing an alarm if a fiber link fails

Link Fault Signaling occurs when copper link or BOTH fiber links fail

Automatically switches back to the primary fiber link if it recovers after a failure and fail-over to the redundant fiber link

**Management:**

Alarm LED illuminates to indicate link failure

Status LEDs for easy monitoring of device's status

**Mechanical & Environmental:**

External power supply

Chassis-compliant (internal power supply)

FCC Class A & CE approved

FCC Class A CE Approval Chassis Compliant

# UT-1312 Gigabit Redundant-link Converter

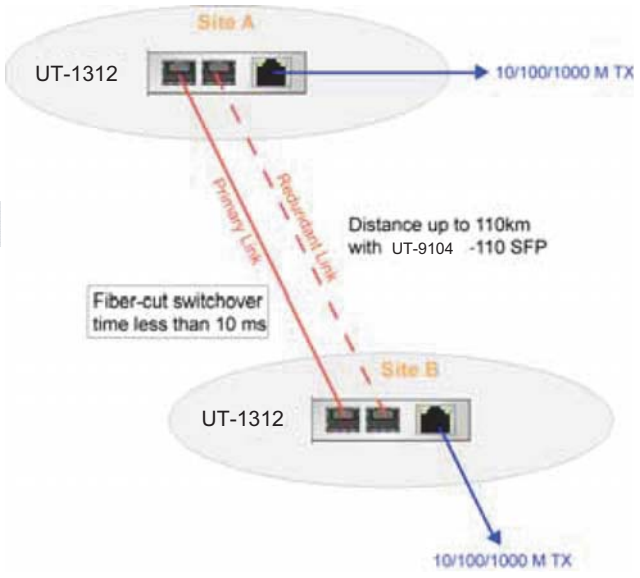
10/100/1000 to 2-slot 1000SX/LX (SFP) Converter

## Specifications:

| | |
|---|---|
| **Standards:** | IEEE 10/100Base-TX<br>IEEE 802.3ab 1000Base-T<br>IEEE 802.3z 1000Base-SX/LX |
| **Connector:** | 1 x RJ-45<br>2 x Fiber |
| **Max. Distance:** | UTP: 100 meters (Cat. 5/5e/6)<br>Fiber: SFP; up to 110km (single-mode) |
| **Unit LED:** | PWR: Illuminates for normal operation<br>ALM: Illuminated when failure occurs on any fiber link or on Link-Fault Signaling<br>PRI: Primary link – Illuminated when receiving link pulses from compliant devices – Flashing when data packets are being transmitted / received<br>RDT: Redundant link – Illuminated when receiving link pulses from compliant devices – Flashing when data packets are being transmitted / received |
| **MDI/MDI-X** | Auto Selection |
| **Power:** | Power Input: 12V DC @ 0.8A, external power supply adapter<br>Frequency: 47Hz to 63Hz |
| **Temperature:** | Operating: °C to 50°C<br>Storage: -20°C to 70°C |
| **Humidity:** | Operating: 10% to 90% RH<br>Storage: 5% to 90% RH |
| **Emissions:** | FCC Part 15 of Class A & CE approved |
| **Dimensions:** | 109.2 x 73.8 x 23.4mm (D x W x H) |
| **Weight:** | 160g |
| **Dip Switches:** | DIP 1 LFS: Enable/disable Link-Fault Singnaling (LFS) |

## Applications:

The following illustrates typical applications for the UT-1312 series. The actual distances will depend on several factors, including the quality of cables used and the terminal equipment employed.




## Ordering Information:

**UT-1312 :**
Gigabit Triple-Speed to 2-Slot 1000SX/LX (SFP) Converter

**UT-9104 :**
Mini GBIC, 1.25G SFP-type Multi-mode, 3.3V – 500m

**UT-9104 - 10/30/50/70/110:**
Mini GBIC, 1.25G SFP-type Single-mode, 3.3V – 10 / 30 / 50 / 70 / 110km

(August 2006)
Specifications subject to change without prior notice.

# UT-1310 Gigabit Triple-Speed Converter

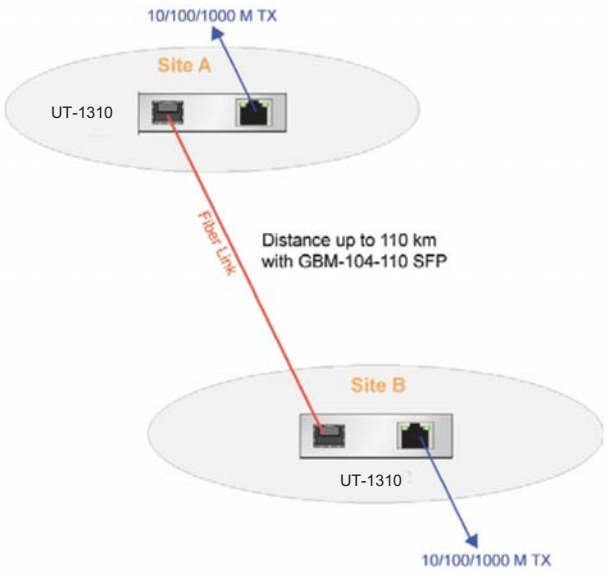
10/100/1000 to 1000SX/LX (SFP) Converter

## Specifications:

| | |
|---|---|
| **Standards:** | IEEE 10/100Base-TX |
| | IEEE 802.3ab 1000Base-T |
| | IEEE 802.3z 1000Base-SX/LX |
| **Connector:** | 1 x RJ-45 |
| | 1 x Fiber |
| **Max. Distance:** | UTP: 100 meters (Cat. 5/5e/6) |
| | Fiber: SFP; up to 110km (single-mode) |
| **Unit LED:** | PWR: Illuminated for normal operation |
| | ALM: Illuminated when failure occurs on fiber or copper link |
| | LNK/ACT: Fiber link – Illuminated when receiving link pulses from compliant devices – Flashing when data packets are being transmitted / received |
| **MDI/MDI-X** | Auto Selection |
| **Power:** | Power Input: 12V DC @ 0.8A, external power supply adapter |
| | Frequency: 47Hz to 63Hz |
| **Temperature:** | Operating: 0°C to 45°C |
| | Storage: -20°C to 70°C |
| **Humidity:** | Operating: 10% to 80% RH |
| | Storage: 5% to 90% RH |
| **Emissions:** | FCC Part 15 of Class A & CE approved |
| **Dimensions:** | 109.2 x 73.8 x 23.4mm (D x W x H) |
| **Weight:** | 158g |
| **Dip Switches:** | DIP 1 – LFS: Enable/Disable Link-Fault Singnaling (LFS) |

## Applications:

The diagram on the right illustrates a typical application for the UT-1310 converter. The actual distances will depend on several factors, including the quality of cables used and the terminal equipment employed.




## Ordering Information:

**UT-1310 :**
Gigabit Triple-Speed to 1000SX/LX (SFP) Converter

**UT-9104 :**
Mini GBIC, 1.25G SFP-type Multi-mode, 3.3V – 500m

**UT-9104 - 10/30/50/70/110:**
Mini GBIC, 1.25G SFP-type Single-mode, 3.3V – 10 / 30 / 50 / 70 / 110km

(August 2006)