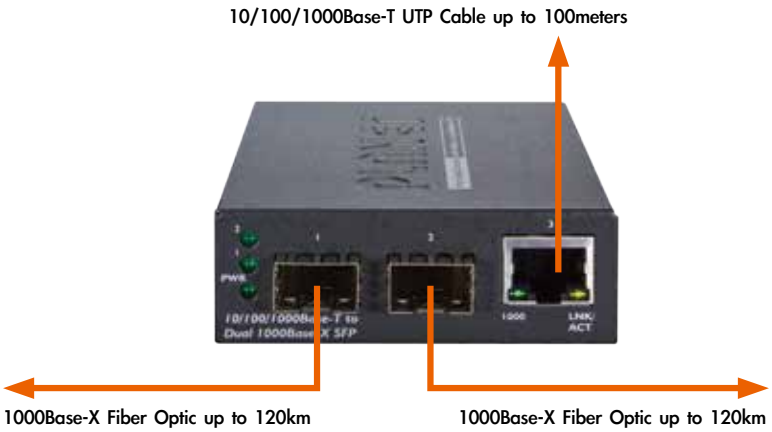
10/100/1000Base-T to Dual 1000Base-X SFP Media Converter

PLANET GT-1205A Gigabit SFP Media Converter is upgraded by providing 2 Gigabit SFP slots, strengthened redundant function, and other features shown below:

- DIP Switch for 3-port Operation in Gigabit Switch Mode or Redundant Mode
- Hardware Fiber Port Redundant

Highly Convenient and Distance Extendable

The GT-1205A is equipped with one 10/100/1000Base-T port and dual Gigabit SFP slots to support conversion between 10/100/1000Base-T and 1000Base-X network. The dual SFP slots make the Ethernet signals connect easily and efficiently by adding single-mode or multi-mode media modules or the combination of both types. The GT-1205A provides high reliability and flexibility to extend the media transmission distance up to 550m, 10km or longer, depending on the optional 1000Base-SX / LX SFP transceiver modules.



Standard

- Complies with IEEE 802.3 10Base-T
- Complies with IEEE 802.3u 100Base-TX
- Complies with IEEE 802.3ab 1000Base-T
- Complies with IEEE 802.3z 1000Base-SX / LX
- IEEE 802.3x full-duplex flow-control, back-pressure in half-duplex eliminate packets loss

Interface

- Dual 1000Base-SX / LX SFP fiber-pptic slots
- One 10/100/1000Base-T Copper, auto MDI/MDIX function
- Auto-negotiation for 10/100/1000Base-T; half-duplex or full-duplex for 10Mbps and 100Mbps, full-duplex for 1000Mbps
- Supports maximum frame size up to 1522 bytes
- IEEE 802.1Q Tag VLAN transparent, multicast pass through

Redundancy

- Link status auto-detecting and redundant on dual ports with the same connector type
- Allows only the Primary-Port or the Backup-Port to activate at a time
  - When the Primary-Port link fails occurs, the traffic swaps to Backup-Port automatically
  - Once the Primary-Port link regains, the traffic swaps from the Backup-Port to the Primary-Port
- Hardware fiber port redundant

Mechanical

- External 5V / 2A DC power supply
- LED indicators for easy network diagnose
- DIP switch for 3-port operation in Gigabit switch mode or redundant mode
- Compact in size, easy installation
- Co-works with PLANET 10”/19” Media Converter Chassis (MC-700 / MC-1500 / MC-1500R / MC-1500R48)
- Wall mounting and DIN-Rail installation supported

Adjustable 3-Port Switch Mode or 2 Fiber Port Redundant Mode

Via the built-in DIP switch, the GT-1205A can be configured as 3-port Ethernet switch or 2-port Redundant Media converter. With the 3-port switch mode, the GT-1205A can operate in Store-and-Forward mechanism with high performance; on the other hand, when in the 2-port redundant mode, it provides rapid fiber redundancy of link for highly critical Ethernet applications. The redundant mode also supports auto-recovering function. If the destination port of a packet is link-down, it will forward the packet to the other port of the backup pair.

Easy Deployment Standalone or with Chassis

The GT-1205A Gigabit Media Converter can be used as a standalone unit or as a slide-in module to the PLANET Media Converter Chassis, MC-700 and MC-1500 chassis series. These media chassis can assist in providing DC power to the GT-1205A Gigabit Media Converter and the fiber-optic network can be maintained at one central location. With the 3-port switch mode, they work in high performance Store and Forward mechanism, and prevent packet loss with IEEE 802.3x Flow Control (Full-duplex) and Back Pressure (Half-duplex) function.

Plug & Play Installation

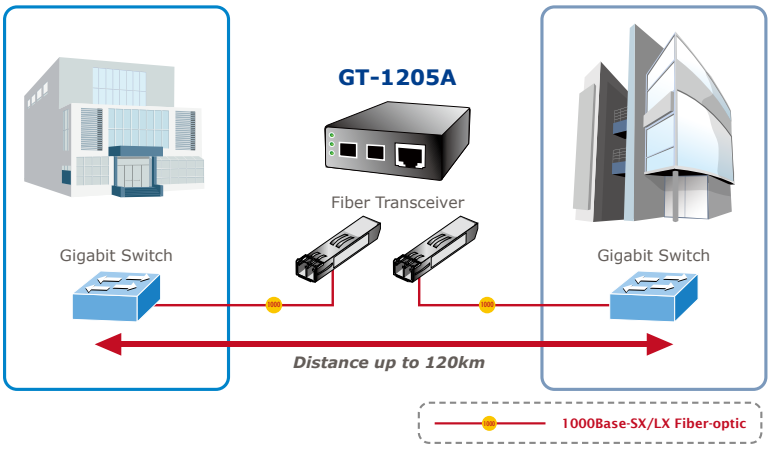
As the GT-1205A Gigabit Media Converter fully complies with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T and IEEE 802.3z 1000Base-LX / SX, the Gigabit media conversion installation is quite quick and easy simply by using the plug and play feature.

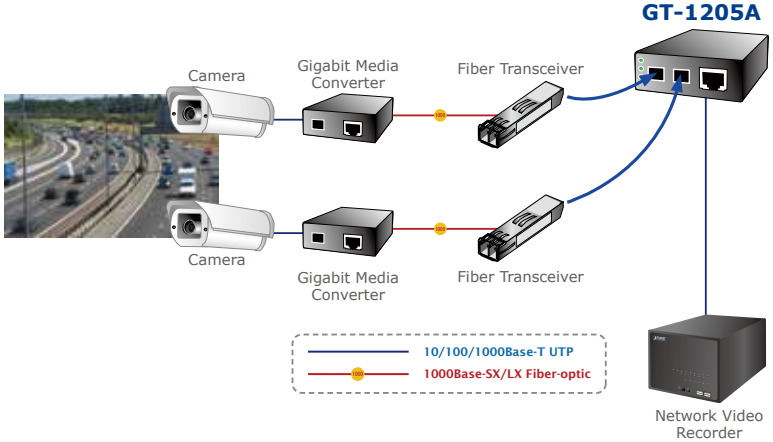
Applications

Gigabit Ethernet Distance Entension

The GT-1205A directly converts the media from the Gigabit fiber to twisted pair interface. For example, it can be applied between the Gigabit Fiber Switch and the Gigabit Copper Network Card to perform media conversion and transmission.

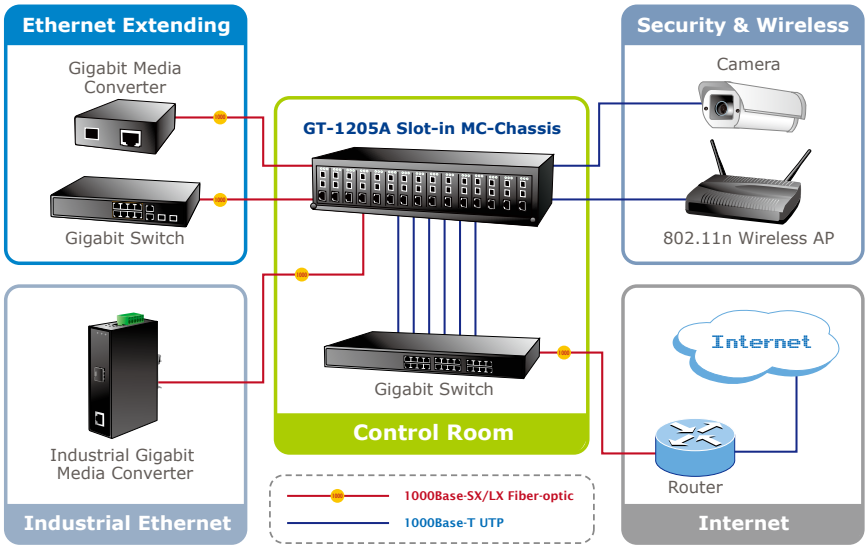
With the conversion, you can easily have the transmission distance of Gigabit copper cable extended up to 550 meters or longer (depending on SFP module). Built in with two SFP ports, the GT-1205A can integrate with the existing copper switch to provide Gigabit fiber transmission without the need of replacing with the Gigabit Fiber Switch. With the Gigabit fiber transmission, the GT-1205A enables video stream to be delivered from the camera up to 120km away to local Network Video Recorder.





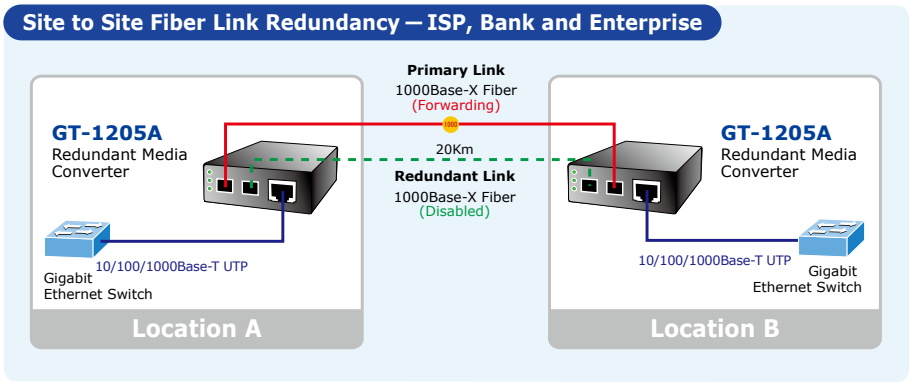
Fiber-Optic Networking for ISPs, System Integrators, Enterprises, and Homes

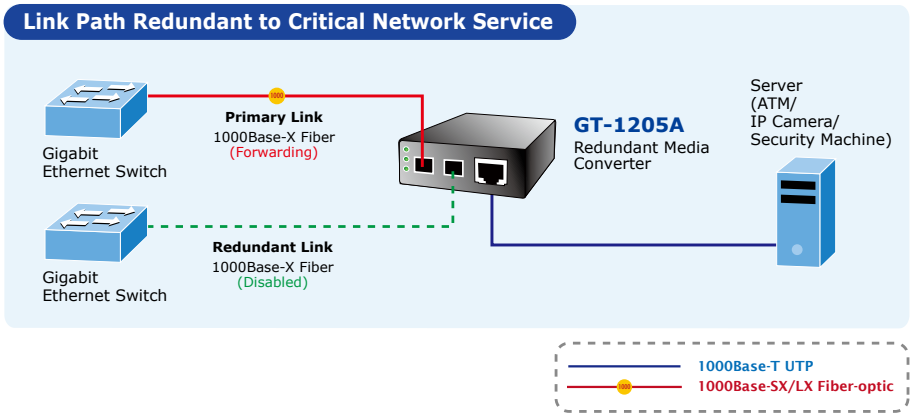
With high performance of data transmission and easy installation, the GT-1205A can build the ISP network solution of FTTH (Fiber to the Home), FTTC (Fiber to the Curb) and FTTB (Fiber to the Building). The GT-1205A is also ideal for small office network environment of enterprises.



Fault Tolerant Redundant Link for Critical Network Applications

The GT-1205A is designed for optical fiber networks that require rapid link redundancy. With the auto-recovering feature, the redundant media converter responses rapidly for critical applications.





Specifications

Model	GT-1205A
Hardware Specifications	
Hardware Version	2
Ports	Copper: 1 x 10/100/1000Base-T port Fiber: 2 x 1000Base-X SFP slots
Cable	**Twisted-Pair** • 10Base-T: 2-Pair UTP CAT. 3, 4, 5, up to 100 meters • 100Base-TX: 2-Pair UTP CAT. 5, 5e up to 100 meters • 1000Base-T: 4-Pair UTP CAT. 5e, 6 up to 100 meters **Fiber-Optic Cable** 50/125μm or 62.5/125μm multi-mode fiber cable provides up to 220 & 550 meters 9/125μm single-mode cable provides long distance of 10/ 15/ 20/ 30/ 40/ 50/ 60/ 70/ 120km (vary on SFP module)
LED Display	**System:** One Power LED (Green) **Fiber Port:** Two LNK/ACT LED (Green) **TP Port:** One Speed LED (Green) , One LNK/ACT LED (Orange)
Switch Processing Scheme	Store and Forward
Fabric	6Gbps
Throughput (packet per second)	4.4Mpps
Maximum Packet Size	1522 Bytes
Flow Control	Back pressure for half-duplex. IEEE 802.3x pause frame for full-duplex
Power Requirements	5V DC, 2A max.
Power Consumption	5.4 watts / 18.5 BTU per hour max.
Dimensions (W x D x H)	94 x 70 x 26 mm
Weight	191g (device only)
Standard Conformance	
EMI Safety	FCC Class B, CE
Operating Environment	0 ~ 50 degrees C
Storage Environment	-10 ~ 70 degrees C
Operating Humidity	5 ~ 95%, Relative Humidity, non-condensing
Storage Humidity	5 ~ 95%, Relative Humidity, non-condensing
Standard Compliance	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX IEEE 802.3ab 1000Base-T IEEE 802.3z 1000Base-SX/LX IEEE 802.3x Flow Control

Ordering Information

GT-1205A	10/100/1000Base-T to Dual 1000Base-X SFP Media Converter

Accessory

RKE-DIN	Din-Rail Kit For Media Converter

Accessory

MGB-Series Transceiver	1000Base-SX/LX SFP Transceiver

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