



# KGC-300



## 1000Base-T to 1000Base-X Gigabit Media Converter

### Product Highlights:

- Full wire speed performance
- SFP flexibility
- Low power consumption
- Optional DIN-Rail mounting
- Center Chassis installation support
- Options for Bi-Di communication
- Options for CWDM

DIN-Rail Mounting Bracket  
KC-3DR



Managed Center Chassis  
KC-1300



Powered via optional USB cable



The Gigabit media converter is designed to convert 1000Base-T signals to/from 1000Base-X fiber signals. It is used to extend the connection distance between two Gigabit Ethernet devices via fiber cable transparently with no performance degradation.

With the SFP (Mini-GBIC) connector design, the media converter not only supports existing variety of multimode and single mode fibers, but also preserves the flexibility to adapt to any change of your fiber network in the future. It also supports center chassis installation with optional power redundancy and management features when a larger fiber network is required. With pre-configured fiber transceivers, the converter also can support Bi-Di WDM and CWDM fiber network applications.

### Key Features:

- Comply with IEEE 802.3ab 1000Base-T, 802.3z 1000Base-SX/LX standard
- Provide direct media conversion for Gigabit copper and Gigabit fiber
- Support full wire speed conversion
- Support transparent conversion of any packet types with no packet length limitation
- Support auto-negotiation with link partners
- Provide link fault pass through between copper and fiber link
- Provide SFP on fiber port for mounting variety of fiber options
- Support optional DIN-Rail installation
- Support center chassis installation to achieve the advantages of central power, optional power redundancy and management
- Ideal solution for multimode, short reach up to long reach single mode fiber, Bi-Di and CWDM applications

### Specifications:

Standard	IEEE 802.3ab, 802.3z
Copper Port	Shielded RJ-45, 1000Mbps, Auto-negotiation capable, Auto-MDI/MDI-X
Fiber Port	SFP connector with pre-configured SFP fiber transceiver Far End Fault support
Network Cables	Copper port: Cat.5e recommended or higher up to 100m Fiber port: MMF 50/125µm, 62.5/125µm, SMF 9/125µm
Port-to-Port Latency	1µs (Cut-through latency for all frame sizes)
LED Indication	Power status, SFP On status, Link status, Optical link status
Mounting	Desktop, Wall, DIN-Rail (optional), Center chassis
Center Chassis	Up to 16 units in one rack chassis with one central power Support optional power redundancy and management
Power Input	+5 ~ +12VDC (+/-5%) Consumption 2W max. @7.5V
Environment	Operation Temperature: -5°C ~ 55°C Storage Temperature: -20°C ~ 85°C Relative Humidity: 10% ~ 90% non-condensing



## Ordering Informations:

Model	Fiber				Distance
	No SFP Transceiver				
-SX	LC	850	50/125 62.5/125		500m 200m
-LX	LC	1310	MMF SMF		550m 10km
-LX20	LC	1310	SMF		20km
-LX30	LC	1310	SMF		30km
-LX50	LC	1550	SMF		50km
-LX70	LC	1550	SMF		70km
-W3510	LC	Tx1310 Rx1550	Bi-Di SMF		10km
-W5310	LC	Tx1550 Rx1310	Bi-Di SMF		10km
-W3520	LC	Tx1310 Rx1550	Bi-Di SMF		20km
-W5320	LC	Tx1550 Rx1310	Bi-Di SMF		20km
-W3540	LC	Tx1310 Rx1550	Bi-Di SMF		40km
-W5340	LC	Tx1550 Rx1310	Bi-Di SMF		40km
-W3410	LC	Tx1310 Rx1490	Bi-Di SMF		10km
-W4310	LC	Tx1490 Rx1310	Bi-Di SMF		10km
-W3410S	SC	Tx1310 Rx1490	Bi-Di SMF		10km
-W4310S	SC	Tx1490 Rx1310	Bi-Di SMF		10km
-ESX	LC	850	MMF		500m
-ELX	LC	1310	SMF		10km



FCC Part 15, Class B  
CISPR 22 Class B

### Katron Technologies Inc.

15F-7, No. 79, Sec. 1, Hsin Tai Wu Rd.,  
Hsi-chih District, New Taipei City, Taiwan  
Tel: 886-2-2698-3878  
Fax: 886-2-2698-3873  
E-mail: kti@ktinet.com.tw  
URL: http://www.ktinet.com.tw

### KTI Networks Inc.

10415-A Westpark Drive, Houston,  
TX 77042. U.S.A.  
Tel: 1-713-266-3891  
Fax: 1-713-914-0555  
E-mail: contact@ktinet.com  
URL: http://www.ktinet.com

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Dimension 108 x 72.5 x 23 mm (WxDxH)

Approval FCC Class B, CE mark, CISPR 22 Class B

## Fiber Ordering Informations:

Model	Fiber Port	Wavelength	Tx Power*	Rx Sens.	Rx Max.
-SX	LC MMF	850nm	-9.5 ~ -4dBm	-18dBm	0dBm
-LX	LC SMF	1310nm	-9.5 ~ -3dBm	-20dBm	-3dBm
-LX20	LC SMF	1310nm	-8 ~ -2dBm	-23dBm	-1dBm
-LX30	LC SMF	1310nm	-4 ~ +1dBm	-23dBm	-3dBm
-LX50	LC SMF	1550nm	-4 ~ +1dBm	-23dBm	-3dBm
-LX70	LC SMF	1550nm	0 ~ +5dBm	-24dBm	-3dBm
-W3510	Bi-Di LC SMF	Tx 1310nm Rx 1550nm	-9 ~ -3dBm	-21dBm	-1dBm
-W5310	Bi-Di LC SMF	Tx 1550nm Rx 1310nm	-9 ~ -3dBm	-21dBm	-3dBm
-W3520	Bi-Di LC SMF	Tx 1310nm Rx 1550nm	-8 ~ -3dBm	-23dBm	-3dBm
-W5320	Bi-Di LC SMF	Tx 1550nm Rx 1310nm	-8 ~ -3dBm	-23dBm	-3dBm
-W3540	Bi-Di LC SMF	Tx 1310nm Rx 1550nm	-3 ~ +2dBm	-23dBm	-1dBm
-W5340	Bi-Di LC SMF	Tx 1550nm Rx 1310nm	-3 ~ +2dBm	-23dBm	-1dBm
-W3410	Bi-Di LC SMF	Tx 1310nm Rx 1490nm	-9 ~ -3dBm	-21dBm	-1dBm
-W4310	Bi-Di LC SMF	Tx 1490nm Rx 1310nm	-9 ~ -3dBm	-21dBm	-1dBm
-W3410S	Bi-Di SC SMF	Tx 1310nm Rx 1490nm	-9 ~ -3dBm	-21dBm	-1dBm
-W4310S	Bi-Di SC SMF	Tx 1490nm Rx 1310nm	-9 ~ -3dBm	-21dBm	-1dBm

\* Data for 62.5/125µm MMF, 9/125µm SMF

### Extended operating temperature -10 ~ 70°C

-ESX	LC MMF	850nm	-9.5 ~ -4dBm	-18dBm	0dBm
-ELX	LC SMF	1310nm	-9.5 ~ -3dBm	-20dBm	-3dBm