



# KCD-400



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

The industrial KCD-400 media converter series provides industrial strength Gigabit Ethernet copper -to-fiber media conversion, allowing for 1000Base-T-to-1000Base-X over multi-mode or optional single-mode fiber optical media. 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.

DIN-Rail Mounting



Panel Mounting Bracket  
C03-4006-101



### Benefits:

- Plug and play design with no configuration setting
- Wide operating temperature range for temperature critical environment
- Support DIN-Rail mounting and panel mounting
- Provide two power input types to meet more application needs
- Accept wide power input voltage range for application flexibility
- Industrial-rated Emission and Immunity performance

### Key Features:

- Comply with IEEE 802.3ab 1000Base-T, IEEE 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 pass through between copper and fiber link
- Provide SFP on fiber port for mounting variety of fiber options
- Low power consumption
- Two power interface types: screw terminal block and DC Jack
- Supports DIN-Rail mounting and optional screwed plane mounting

### Specifications:

Standard	IEEE 802.3au, 802.3z
Conversion	Direct 1000BASE-T to 1000BASE-X with minimum latency
Packet Types	Transparent conversion with no modification to: - Standard IEEE 802.3 Ethernet packet frames - IEEE 802.1Q tagged packet frames
Copper Port	Shielded RJ-45, 1000Mbps Auto-negotiation capable Auto-MDI/MDI-X crossover function
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
LEDs	Power status, SFP ON status Link status, Optical link status



### EMI EMS Safety Environmental Tests:

Test	Standard	Specifications
FCC/EMI	FCC Rule Part 15	Class B
CE/EMC/EMI	EN55022, CISPR 22	Class B
CE/EMC/Harmonic	EN 61000-3-2	< 75 W
CE/EMC/VFF	EN 61000-3-3	Clause 5
CE/EMC/EMS	EN 55024	
ESD Test	IEC 61000-4-2	Contact: +/-6KV Air: +/-8KV
RS Test	IEC 61000-4-3	Strength: 10V/m
EFT/BURST	IEC 61000-4-4	DC IN: +/-3KV TP: +/-4KV
Surge Immunity	IEC 61000-4-5	DC IN: +/-1KV AC IN: +/-4KV TP: +/-1KV
CS Test	IEC 61000-4-6	Level 3
Magnetic Field Imm.	IEC 61000-4-8	50Hz 40A/m
Voltage Dips Imm.	IEC 61000-4-11	Interruption: C Dips: A
Safety	EN 60950, IEC 60950	
Dielectric Voltage	IEEE 802.3	TP, 1500VAC/60sec.
Insulation Resistance	IEEE 802.3	TP, 500VDC/10Mohm
Cold Test	IEC 68-2-1 Test Ad	-20°C, 96hrs
Dry Heat Test	IEC 68-2-2 Test Bd	+70°C 40%RH 96hrs
Damp Heat Test	IEC 68-2-3	+60°C 90%RH 96hrs -20°C 96hrs
Storage Test	IEC 68-2-48	+85°C 40%RH 96hrs
Vibration Test	IEC 68-2-34	

### Ordering Informations:

Model KCD-400-xxx	Fiber Mode	Connertor	Ref. Distance
-SX	62.5/125 50/125	LC	200m 500m
-LX	MM SM	LC	550m 10km
-LX20	SM	LC	20km
-LX110	SM	LC	110km



FCC Part 15, Class B  
CISPR 22 Class B

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### KTI Networks Inc.

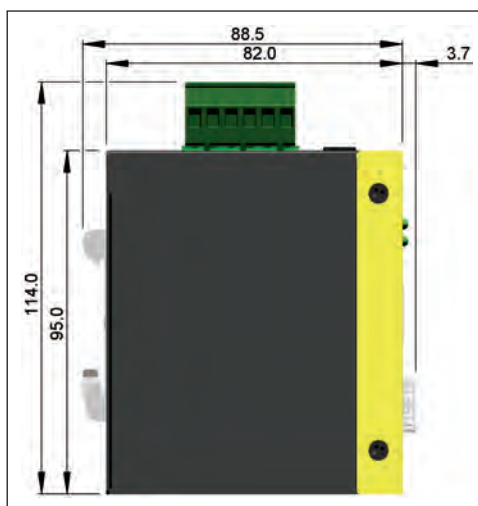
10415-A Westpark Drive, Houston,  
TX 77042. U.S.A.  
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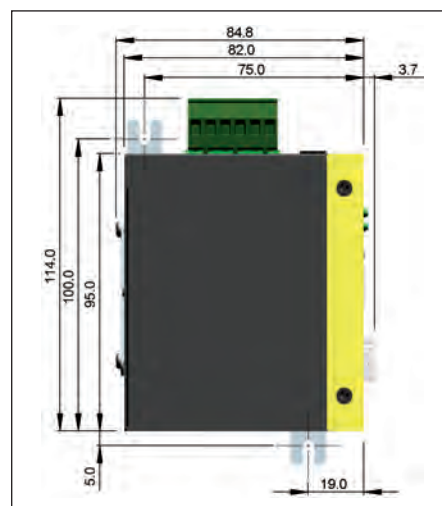
Network Cables	Copper port: Cat.5e recommended or higher up to 100m Fiber port: MMF 50/125µm, 62.5/125µm, SMF 9/125µm
LEDs	Power status, SFP On status Link status, Optical link status
DC Power Input	Screwed terminator block: 2 pairs of +/- contacts 1 pair of power alarm relay output contacts DC jack: -D 6.3mm/+D 2.0mm Operating voltage range: +7 ~ +30VDC
Power Consumption	2W max. @30VDC power input
Dimension	28 x 82 x 95 mm (WxDxH)
Weight	240 g
Housing	Enclosed metal with no fan
Mounting Support	DIN-Rail mounting, Panel mounting
Environment	Operating Temperature: -20°C ~ 70°C Storage Temperature: -20°C ~ 85°C Relative Humidity: 5% ~ 95% non-condensing
Approval	FCC Class B, CE/EMC Class B, EN60950 safety

### Fiber Optical Specifications:

Model	Fiber	Wavelength	Tx Power	Rx Sens.	Rx Max.	Distance
-SX	LC 62.5/125 MMF 50/125 MMF	850nm	-9.5 ~ -4dBm	-18dBm	0dBm	220m 500m
-LX	LC MMF SMF	1310nm	-9.5 ~ -3dBm	-20dBm	-3dBm	550m 10km
-LX20	LC SMF	1310nm	-8 ~ -2dBm	-23dBm	-1dBm	20km
-LX110	LC SMF	1550nm	0 ~ +5dBm	-30dBm	-8dBm	110km



DIN-Rail Dimension



Panel Dimension