



# KGC-261-DP-AT/G Series



## Industrial Managed Media Converters with PoE+ PSE Support

### Product Highlights:

- Tri-speed copper to dual-speed fiber conversion
- Advanced LFPT, OPA, ALS features
- PoE PSE functionality
- Variety of PoE options
- Web & SNMP management

### DC Input:



### Approval:

- FCC Class A, VCCI Class A
- CE mark Class A
- LVD IEC60950-1 safety
- EN 55032 emission
- EN 55024 immunity
- IEC 60068-2-64 vibration
- IEC 60068-2-27 shock 30G test

### Key Features:

- Industrial Media Converter with PoE+ PSE for general applications
- Tri-speed 10/100M/1Gbps copper to dual-speed 100M/1Gbps fiber conversion
- Comply with IEEE 802.3, 802.3u, 802.3ab, 802.3z, 802.3af, 802.3at standard
- Support full wire speed conversion for Gigabit copper to Gigabit fiber
- Provide dual-speed SFP on fiber port for mounting variety of fiber options
- Provide important LFPT (Link Fault Pass Through) media converter function
- Support Jumbo frame conversion
- Energy Efficient Ethernet (EEE) support
- Alarm events relay output
- Optical Power Alarm (OPA) function
- Auto Laser Shutdown (ALS) function
- Fiber support for multimode, short reach up to long reach single mode fiber, Bi-Di applications
- Web-based configuration management support
- Support SNMP management
- Provide variety of PoE options for different power level applications
- PoE shutdown protection for non-compliant PD, disconnection, over-current and short-circuit

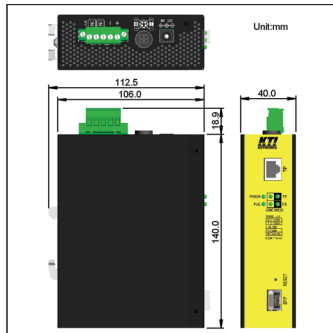
### Specifications:

|                     |  |
|---------------------|--|
| Standard            | IEEE 802.3u, 802.3ab, 802.3z, 802.1ad, 802.3az, 802.1Q, 802.3af, 802.3at   |
| Copper Port         | Shielded RJ-45, 10/100/1000Mbps, Full/Half duplex<br>Auto-negotiation, Auto-MDI/MDI-X  |
| Fiber Port          | SFP connector with pre-configured SFP fiber transceiver<br>100Mbps/1Gbps Full duplex, Auto-negotiation, Far End Fault support                        |
| Network Cables      | Copper port: Cat.5e recommended or higher up to 100m<br>Fiber port: MMF 50/125µm, 62.5/125µm, SMF 9/125µm  |
| Power over Ethernet | IEEE 802.3at compliant (High power PoE)<br>32W max. at port output for Cat.5 distance of 100 meters  |
| LED Indication      | Unit: power status, PoE status<br>Per port: 1G/Link/Activity, 10-100/Link/Activity   |
| Jumbo Frame size    | Up to 9.6K bytes   |
| DC TB Input         | Flange terminal block: DC+/ DC-/ 3 Relay contacts<br>Rated voltage range: +12 ~ +57VDC   |
| Relay Output        | 3 dry contacts for NC & NO pairs on DC TB<br>Contact rating: 30VDC/1A or 120VAC/0.5A<br>Alarm events: power failure, configured port link fault, OPA |

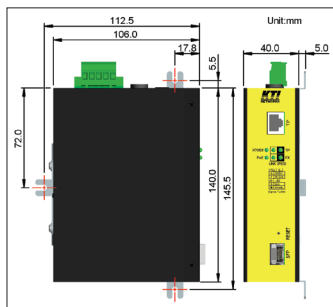


### EMI EMS Safety Environmental Tests:

| Test                  | Standard          | Specifications                               |
|-----------------------|-------------------|--|
| FCC/EMI               | FCC Rule Part 15  | Class A                                      |
| CE/EMC/EMI            | EN 55032          | Class A                                      |
| CE/EMC/EMS            | EN 55024          |  |
| ESD Test              | IEC 61000-4-2     | Contact: +/-8kV<br>Air: +/-15kV              |
| RS Test               | IEC 61000-4-3     | Strength: 20V/m                              |
| EFT/BURST             | IEC 61000-4-4     | DC IN: +/-4kV<br>RJ-45: +/-4kV               |
| Surge Immunity        | IEC 61000-4-5     | DC IN: +/-1kV<br>RJ-45: +/-4kV               |
| CS Test               | IEC 61000-4-6     | Level 3                                      |
| Magnetic Field Imm.   | IEC 61000-4-8     | 50/60Hz, 100A/m, 60s<br>50/60Hz, 1000A/m, 1s |
| Safety                | EN 60950-1        |  |
| Dielectric Voltage    | IEEE 802.3        | TP, 1500VAC/60sec.                           |
| Insulation Resistance | IEEE 802.3        | TP, 500VDC/10Mohm                            |
| Cold Test             | IEC 60068-2-1 Ad  | -40°C, 72hrs                                 |
| Dry Heat Test         | IEC 60068-2-2 Bd  | +75°C, 30%RH, 72hrs                          |
| Damp Heat Test        | IEC 60068-2-3 Ca  | +75°C, 95%RH, 72hrs                          |
| Storage Test          | IEC 60068-2-48    | -40°C, 96hrs<br>+85°C, 30%RH, 96hrs          |
| Vibration Test        | IEC 60068-2-64 Fh | 10~150Hz, 2.0 g/Hz                           |
| Shock Test            | IEC 60068-2-27 Ea | 30G  |



DIN-Rail Dimension



Panel Dimension



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**DC Jack Input** Power jack (Contacts: -D6.3mm, +D2.0mm)  
 Rated voltage range: +12 ~ +48VDC

**DC DIN Input** Power DIN, Mini-DIN-4 socket  
 Contact rating: 2.7A 48V  
 Rated voltage range: +12 ~ +48VDC

**DC Power** General: +12 ~ +57VDC  
 PoE: +45 ~ +57VDC  
 Polarity reversal protection

**Power Consumption** 5W max.@55V (Full load without PoE output)  
 37W max.@55V (Full load with PoE+ max. output)

**Housing** Enclosed metal with no fan

**Environment** Operating Temperature: -40°C ~ 75°C  
 Storage Temperature: -40°C ~ 85°C  
 Relative Humidity: 5% ~ 95% non-condensing

**Dimension** 40 x 106 x 140 mm (WxDxH)

**Mounting Support** DIN-Rail, Panel (optional)

**MTBF** 250K hours min

### Management:

**Management** Web-based browser interface, SNMP manager Port Control Operating mode, Flow control, LLDP, PoE control

**Packet Filtering** 802.1Q tagged packet filtering, Untagged packet filtering

**802.1Q VLAN** Ingress 802.1Q tag stripping, Egress 802.1Q tagging (tag insertion) S-tag tagging (802.1ad double tagging)

**Maintenance** Restore factory default, reboot, firmware update

**SNMP** Trap events: Bootup, Login failure, Port link changes, OPA  
 SNMP Private MIB: DDM, Remote boot, OPA, PoE

### Fiber Optical Specifications:

| 1Gbps              | Fiber Port                    | Wavelength             | Tx Power*    | Rx Sens. | Rx Max.   | Distance*    |
|--------------------|-------------------------------|------------------------|--------------|----------|-----------|--------------|
| -SX                | LC 62.5/125 MMF<br>50/125 MMF | 850nm                  | -9.5 ~ -4dBm | -18dBm   | 0Bm       | 220m<br>500m |
| -LX                | LC MMF<br>SMF                 | 1310nm                 | -9.5 ~ -3dBm | -20dBm   | -3dBm     | 550m<br>10km |
| -LX70              | LC SMF                        | 1550nm                 | 0 ~ +5dBm    | -24dBm   | -3dBm     | 70km         |
| -W3510             | Bi-Di LC SMF                  | Tx 1310nm<br>Rx 1550nm | -9 ~ -3dBm   | -21dBm   | -1dBm     | 10km         |
| -W5310             | Bi-Di LC SMF                  | Tx 1550nm<br>Rx 1310nm | -9 ~ -3dBm   | -21dBm   | -1dBm     | 10km         |
| 100Mbps Fiber Port | Wavelength                    | Tx Power*              | Rx Sens.     | Rx Max.  | Distance* |              |
| -FM                | LC MMF                        | 1310nm                 | -20 ~ -14dBm | -31dBm   | 0dBm      | 2km          |
| -FS30              | LC SMF                        | 1310nm                 | -15 ~ -8dBm  | -34dBm   | 0dBm      | 30km         |

\* Tx Power data for 62.5/125µm MMF, 9/125µm SMF  
 Distance: reference connection distance