# KC-300D, KC-300DM

## 10/100Base-TX to 100Base-FX Media Converters

## Product Highlights:

- Full wire speed performance
- Comprehensive configuration options
- Loop back test support
- Remote TP link monitoring
- Low power consumption
- Loop back test support
- Optional Din-Rail mounting
- Center Chassis installation support
- Options for Bi-Di communication
- Options for CWDM

KC-3DR :
Din-Rail mounting bracket

KC-1300 :
Managed center chassis

The media converters are designed to convert 10Base-T or 100Base-T signals to/from 100Base-FX fiber signals. It is used to extend the connection distance between two Ethernet devices via fiber cable transparently with no performance degradation.The media converters not only support existing variety of multimode and single mode fibers but also support Bi-Di WDM and CWDM fiber network applications. It is also featured with design to support center chassis installation with optional power redundancy and management features when a larger fiber network is required.

Key Features:

- Convert speed and media type in full wire speed
- Support 10/100M dual speed on TP connections, auto-negotiation, and auto-MDI/MDI-X detection
- Link fault pass through function
- Transparent to 802.1Q VLAN tagged packets
- Far End Fault function on FX port
- Support desktop,wall, and DIN-rail mounting
- Support center chassis installation
- Low power consumption
- Support wide range of fiber options
- Provide user accessible settings for TP port configuration,disabling link fault pass through function

KC-300DM Specific

- Provides indications of remote media converter's TP port status
- Provides Loop Back Test function with connected remote media converter

## Specifications:

| | | |
|---|---|---|
| TP Port | IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX<br>Shielded RJ-45 jacks with Auto MDI/MDI-X detection<br>Auto-negotiation for speed and duplex auto detection<br>Forced mode with speed and duplex settings<br>Speed for 10Mbps or 100Mbps, Full-duplex or half-duplex support | |
| FX Port | IEEE 802.3u 100Base-FX compliant<br>Forced 100Mbps, Full duplex (factory default)<br>Far end fault Function | |
| Cable | Cat. 5 UTP cable, MMF - 62.5/125μm, 50/125μm, SMF - 9 /125μm | |
| LEDs | KC-300D: | Power status<br>TP Ports: Link/Act, Speed, Duplex status<br>FX Ports: Link/Act status, Fiber signal detected |
| | KC-300DM: | Power status<br>TP Ports: Link/Act, Speed, Duplex status<br>FX Ports: Link/Act status, Fiber signal detected<br>Remote TP Ports: Link, Speed, Duplex status |

## Ordering Information:

| KC-300D-X<br>KC-300DM-X | Fiber Mode | Connector | Ref. Distance |
|---|---|---|---|
| -T | MM | Dual ST | 2km |
| -C | MM | Dual SC | 2km |
| -EC | MM | Dual SC | 2km |
| -JM | MM | MT-RJ | 2km |
| -VM | MM | VF-45 | 2km |
| -SA2 | SM | Dual SC | 20km |
| -SL2 | SM | Dual SC | 20km |
| -SL3 | SM | Dual SC | 30km |
| -SL4 | SM | Dual SC | 40km |
| -SL6 | SM | Dual SC | 60km |
| -SL7 | SM | Dual SC | 70km |
| -SL9 | SM | Dual SC | 90km |
| -SL10 | SM | Dual SC | 100km |
| -SL12 | SM | Dual SC | 120km |
| -W3515 | SM | Bi-Di SC | 15~20km |
| -W5315 | SM | Bi-Di SC | 15~20km |
| -W3540 | SM | Bi-Di SC | 40km |
| -W5340 | SM | Bi-Di SC | 40km |
| -CxxW40 | SM | CWDM SC | 40km |
| -CxxW80 | SM | CWDM SC | 80km |

MM: Multimode Fiber
SM: Single Mode Fiber
Ref. Distance: Reference connection distance

| | |
|---|---|
| Configuration Switches | Accessible settings:<br>KC-300D - TP mode, TP duplex, TP speed, Link fault pass through<br>KC-300DM - TP mode, TP duplex, TP speed, Link fault pass through, Auto status report |
| Packet Size | Up to 1522 bytes for store-and-forward mode<br>No packet size limit for smart-forward mode (100-to-100) |
| Environment | Operating Temperature: -5°C to 50°C<br>-20°C to 60°C (KC-300D-EC, KC-300DM-EC)<br>Storage Temperature: -20°C to 80°C<br>Relative Humidity: 5% to 95% non-condensing |
| Weight | KC-300D: 210g, KC-300DM: 213g |
| Dimension | 108 x 72.5 x 23 mm (WxDxH) |
| Operating voltage | +5V ~ +12VDC (+/-5%)(Device DC Input) |
| Power Consumption | 2 watts. (max.) |
| Approval | FCC class B, CE class B |

## Fiber Optical Specifications : KC-300D-X, KC-300DM-X

| Model | Connector | FiberCable | Wavelength | Tx Power | Sensitivity | Rx Max. |
|---|---|---|---|---|---|---|
| -T | ST Duplex | MMF | 1310nm | -19~ -14dBm | -31dBm | -14dBm |
| -C | SC Duplex | MMF | 1310nm | -19~ -14dBm | -31dBm | -14dBm |
| -EC | SC Duplex | MMF | 1310nm | -20~ -14dBm | -31dBm | 0dBm |
| -JM | MT-RJ | MMF | 1310nm | -19~ -14dBm | -31dBm | -14dBm |
| -VM | VF-45 | MMF | 1310nm | -20~ -14dBm | -31dBm | -14dBm |
| -SA2 | SC Duplex | SMF | 1310nm | -15~ -8dBm | -31dBm | -7dBm |
| -SL2 | SC Duplex | SMF | 1310nm | -15~ -7dBm | -32dBm | -3dBm |
| -SL3 | SC Duplex | SMF | 1310nm | -15~ -8dBm | -34dBm | 0dBm |
| -SL4 | SC Duplex | SMF | 1310nm | -5~ 0dBm | -34dBm | -3dBm |
| -SL6 | SC Duplex | SMF | 1310nm | -5~ 0dBm | -35dBm | 0dBm |
| -SL7 | SC Duplex | SMF | 1310nm | -3~ +3dBm | -37dBm | 0dBm |
| -SL9 | SC Duplex | SMF | 1310nm | 0~ +5dBm | -37dBm | 0dBm |
| -SL10 | SC Duplex | SMF | 1550nm | -3~ +3dBm | -37dBm | 0dBm |
| -SL12 | SC Duplex | SMF | 1550nm | 0~ +5dBm | -37dBm | 0dBm |
| -W3515 | Bi-Di SC | SMF | TX 1310nm<br>RX 1550nm | -14~ -8dBm | -31dBm | 0dBm |
| -W5315 | Bi-Di SC | SMF | TX 1550nm<br>RX 1310nm | -14~ -8dBm | -31dBm | 0dBm |
| -W3540 | Bi-Di SC | SMF | TX 1310nm<br>RX 1550nm | -8~ 0dBm | -34dBm | 0dBm |
| -W5340 | Bi-Di SC | SMF | TX 1550nm<br>RX 1310nm<br>RX 1310nm | -8~ 0dBm | -34dBm | 0dBm |
| -CxxW40 | CWDM SC | SMF | Tx 1xx0nm<br>RX 1100-1650nm | -5~ 0dBm | -35dBm | 0dBm |
| -CxxW80 | CWDM SC | SMF | Tx 1xx0nm<br>RX 1100-1650nm | 0~ +5dBm | -37dBm | 0dBm |

MMF : Multimode fiber 62.5/125 μm,50/125 μm
SMF : Single Mode fiber 9 /125 μm

FCC Part 15 , Class B
CISPR 22 Class B


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