



# KC-350, KC-351



## PoE-PD-enabled 10/100Base-TX to 100Base-FX Media Converters

### Product Highlights:

- Full wire speed performance
- Comprehensive configuration options
- Best conversion latency
- Remote Loop back test
- Remote TP link monitoring
- Optional Din-Rail mounting
- Powered by PoE, AC adapter, USB
- Options for Bi-Di communication
- Options for CWDM

KS-1080:  
PoE PSE switch



KPOE-100:  
PoE PSE mid-span injector



USB-to-DC Plug:  
Powered via USB



The 350 series are designed to convert 10Base-T or 100Base-T signals to/from 100Base-FX fiber signals. They are used to extend the connection distance between two Ethernet devices via fiber cable transparently with no performance degradation. The variety of fiber options supported includes not only multimode, short reach up to long reach single mode fibers, but also Bi-Di WDM and CWDM fiber network applications. Because of 802.3af compliance, the converters can draw the power via Cat.5 cable connected to a PoE PSE switch or mid-span injector. This feature makes the converter ideal for remote areas of a network without AC power outlets.

#### Important media converter functions:

- Smart forwarding which can auto adapt the conversion to get the minimum latency according to the connection speed
- Link fault pass through between two different media cables
- Transparent conversion for 802.1Q tagged packets
- Far end fault function on the fiber connection
- Manual (forced) configuration for the twisted-pair port to support non-auto devices

#### Advanced media converter functions:

- Support fiber remote loopback test for advanced installation
- Provide remote twisted-pair connection monitoring
- Support Din-rail mounting in Din-rail closet
- Support being powered by PoE via Cat.5 and USB in addition to typical AC power adapter

### Specifications:

|                        |  |
|------------------------|--|
| TP Port                | IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3af PD<br>Shielded RJ-45 jack 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-350/351: Power status, TP Port: Link/Act, Speed, Duplex status,<br>FX Ports: Link/Act status, Fiber signal detected<br>KC-351: Remote TP Ports: Link, Speed, Duplex status  |
| Configuration Switches | Accessible settings:<br>KC-350/351: TP mode, TP duplex, TP speed, Link fault pass through<br>KC-351: 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)  |
| Power Input            | PoE via Cat.5 on RJ-45 from PSE switch or PoE mid-span injector<br>DC jack via external AC power adapter or<br>USB power via proprietary USB cable   |



KC-3DR:  
Din-Rail mounting bracket



### Ordering Informations:

| KC-350-X<br>KC-351-X | Fiber Mode | Connector | Ref. Distance |
|----------------------|------------|-----------|---------------|
| -T                   | MM         | Dual ST   | 2km           |
| -C                   | MM         | Dual SC   | 2km           |
| -SL2                 | SM         | Dual SC   | 20km          |
| -SL3                 | SM         | Dual SC   | 30km          |
| -SL4                 | SM         | Dual SC   | 40km          |
| -SL6                 | SM         | Dual SC   | 60km          |
| -SL8                 | SM         | Dual SC   | 80km          |
| -SL10                | SM         | Dual SC   | 100km         |
| -SL12                | SM         | Dual SC   | 120km         |
| -W3515               | SM         | Bi-Di SC  | 15-20km       |
| -W5315               | SM         | Bi-Di SC  | 15-20km       |
| -CxxW40              | SM         | CWDM SC   | 40km          |

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



FCC Part 15, Class B  
CISPR 22 Class B

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PoE IEEE 802.3af PD compliant  
Input voltage: 36 ~ 57VDC via Cat.5  
Power classification: Class 1  
Power reception: via TP RJ-45 Pin 1,2,3,6 or Pin 4,5,7,8

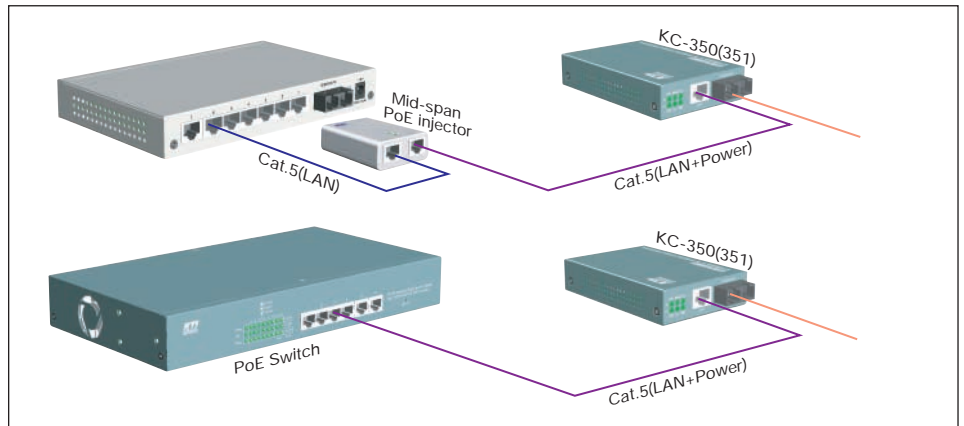
Environment Operating Temperature: -5°C ~ 50°C  
Storage Temperature: -20°C ~ 80°C  
Relative Humidity: 5% ~ 95% non-condensing

Weight KC-350: 210g, KC-351: 213g

Dimension 108 x 72.5 x 23 mm (WxDxH)

Operating Voltage +7V ~ +57VDC input, consumption: 2Watts max.

Approval FCC Class B, CE Class B, IEC60950-1



### Fiber Optical Specifications: KC-350-x, KC-351-x

| Model   | Connector | FiberCable | Wavelength                  | Tx Power     | Rx Sens. | Rx Max. |
|---------|-----------|------------|-----------------------------|--------------|----------|---------|
| -T      | ST        | Duplex MMF | 1310nm                      | -19 ~ -14dBm | -31dBm   | -14dBm  |
| -C      | SC        | Duplex MMF | 1310nm                      | -19 ~ -14dBm | -31dBm   | -14dBm  |
| -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    |
| -SL8    | SC        | Duplex SMF | 1310nm                      | 0 ~ +5dBm    | -36dBm   | 0dBm    |
| -SL10   | SC        | Duplex SMF | 1550nm                      | 0 ~ -5dBm    | -35dBm   | 0dBm    |
| -SL12   | SC        | Duplex SMF | 1550nm                      | 0 ~ +5dBm    | -35dBm   | 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    |
| -CxxW40 | CWDM SC   | SMF        | Tx 1xx0nm<br>RX 1100-1650nm | -5 ~ 0dBm    | -35dBm   | 0dBm    |

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