



# KC-300TF Series



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

In order to expanding more wire connection through fiber cables, KC-300TF Series enhances features by 10/100Mbps, Auto-Negotiation, half & full duplex through TP. KC300TF series are built in powerful heart by switch base IC, which support extra functions like store-and-forward technology, min. packet length 64 bytes, max. IEEE802.3 packet length 1518 bytes, Vlan tag packet 1522 bytes, Auto MAC address learning and flow control.

Above functions are effective to customers who need to convert different interfaces between two nodes and also can customize the speed's modes as they need for the opposite site. Making a compatible and convenient installation to the other installed parties is always the best solution to customers. That is KTI's KC-300TF series can do for all and gets more closer to the generation of fiber to the home (FTTH).

### Benefits of Switch Base Media Converter:

- Making more flexible installation in different speed's modes.
- Making more compatible connection with link partners by different modes setting on board.
- Filtering bad packets and Pocket buffering improve overall network performance.
- Flow control function to prevent packets dropping in traffic congestion.

### Key Features:

- Comply with IEEE802.3 10Base-T, IEEE802.3u 100Base-TX/100Base-FX and IEEE802.3x flow control.
- Provide media conversion for TP and fiber optic media types.
- Extend network span from 2km (Multi-Mode) to 40km (Single-Mode).
- 10/100Mbps, auto-negotiation on TP port.
- Supports IEEE802.3 Ethernet frame 64 ~ 1518 bytes and VLAN tagged frame up to 1522 bytes.
- Auto MAC address learning and 4,096 MAC address table entries.
- Supports back-pressure-based flow control on half duplex and pause-frame-based flow control on full duplex
- Store and forward technology.

## Specifications:

|             |  |
|-------------|--|
| Standard    | IEEE802.3 10Base-T and IEEE802.3u 100Base-Tx<br>100Base-TX/FX. IEEE802.3x flow control.  |
| TP Port     | 10/100Mbps , Shielded RJ-45  |
| FX Port     | 100Base-FX, SC connector   |
| Cables      | TP port: Cat. 5 UTP 100meters on 100Base-TX<br>Cat. 3, 4, 5 UTP 100meters on 10Base-T<br>FX Port: Multi-Mode, 62.5/125μm, 2KM<br>Multi-Mode, 50/125μm, 2KM<br>Single-Mode, 9/125μm, 20KM/40KM<br>Single-Fiber, 9/125μm, 20KM |
| RAM buffer  | 1Mbit  |
| LEDs        | Power, TP link/Act., FX link, TP speed and duplex status   |
| Environment | Operating temperature: -10°C ~ +50°C<br>Storage temperature: -20°C ~ +75°C   |
| Dimension   | 109.5mm x 74.7mm x 24mm (L. W. H.)   |
| Power       | 5VDC, 2.5A   |

## Ordering Information:

| Model        | Fiber Mode | Connector  | Max. Distance |
|--------------|------------|------------|---------------|
| KC-300-TFM2  | MM         | SC         | 2km           |
| KC-300-TFS20 | SM         | SC         | 20km          |
| KC-300-TFS40 | SM         | SC         | 40km          |
| KC-300-WDM30 | SM         | Simplex SC | 20km          |
| KC-300-WDM50 | SM         | Simplex SC | 20km          |

## The Specification of Fiber Optical Transceiver:

| Mode        | Type | Tx Optical Output | Rx Sensitivity | Wavelength | Cable      | Max. Distance |
|-------------|------|-------------------|----------------|------------|------------|---------------|
| Multi-Mode  | SC   | -19dBm            | -32.5dBm       | 850nm      | 62.5/125μm | 2km           |
| Single-Mode | SC   | -15dBm            | -31dBm         | 1300nm     | 9/125μm    | 20km          |
| Single-Mode | SC   | -5dBm             | -31dBm         | 1300nm     | 9/125μm    | 40km          |

## The Specification of Single Fiber Transceiver:

| Mode        | Type          | Tx Optical Output | Rx Sensitivity | Wavelength             | Cable   | Max. Distance |
|-------------|---------------|-------------------|----------------|------------------------|---------|---------------|
| Single Mode | SC Receptacle | -14 ~-7dBm        | -33dBm         | 1300nm TX<br>1550nm RX | 9/125μm | 20km          |
| Single Mode | SC Receptacle | -14 ~-7dBm        | -33dBm         | 1300nm RX<br>1550nm TX | 9/125μm | 20km          |



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