

## 10/100/1000Base-T to 100/1000Base-X

### Compact Industrial Media Converter

#### DK-MC10G-E Series



#### Features

- 1\*10/100/1000Base-T RJ45 port, 1\*100/1000Base-X SFP(SC/ST/FC optional) fiber port
- DC 12~58V input, redundant power supply with polarity reverse/over-voltage protection
- Powerful Dip switch function:
  - 1.LFP; 2. Flow control; 3. Broadcast storm restrain; 4.fiber port 100/1000M selection
- Support 10K Bytes Jumbo frame and 1M large buffer
- Support 4KV surge protection and ESD: Air-15kV, Contact-8kV Protection
- IP40 fan-less and Din-rail hardware design with compact size (30\*85\*85mm)
- Operation temperature: -40°C ~+75°C

#### Overview

The DPTEK DK-MC10G-E series are unmanaged industrial grade media converter with 1-port 10/100/1000-T RJ45 and 1-port 100/1000Base-X fiber optical interfaces. They are featuring with LFP, flow control, broadcast storm restrain and fiber port 100/1000M selection function, which all can be configured by the Dip switch on the top panel.

DK-MC10G-E series are also high cost-effective easy-to-use devices, which provide essential industrial Ethernet networking function, such as wide range power input 12-58VDC, redundant power design with polarity

reverse/over-voltage protection, robust IP40 fan-less compact size housing with Din-rail installation, wide operation temperature from -40°C to 75°C as well as high-level EMI/EMC capability and so on. They are the best choice for heavy industrial factory, transportation, oil & gas, chemical, IP Surveillance and processing automation area where environmental conditions exceed commercial product specifications.

### Technical specification

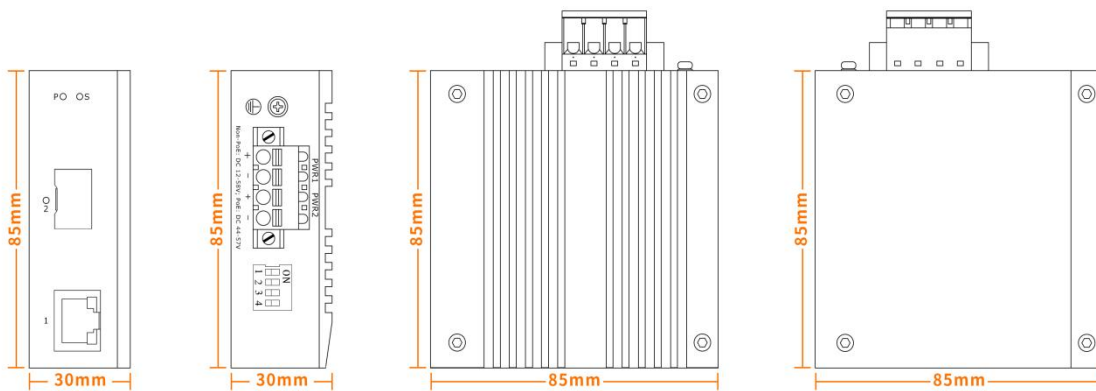
Model No.	DK-MC10G-E		
Interface	Fiber port	Copper RJ45 port	
	1	1	
Ethernet	1*10/100/1000Base-T RJ45 1*100/1000Base-X SFP (SC/ST/FC optional)		
Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3ab Gigabit Ethernet IEEE 802.3x Full-Duplex Flow Control IEEE 802.3az Energy Efficient Ethernet		
Dip Switch	<ol style="list-style-type: none"> <li>LFP</li> <li>Flow control</li> <li>Broadcast storm restrain</li> <li>Fiber port 100/1000M selection</li> </ol>		
LED Indicators	P(Power indicator) Green	Off: the device is power off or failed	
		On: the device power on is normal	
	S(System indicator) Red	Off: the chip is normal	
		On: the chip read/write is unnormal	
	1 (Copper port)	Green indicators	Yellow indicators
		Off: ports link down	Off: port speed is 10/100M
		On: ports link up	On: port speed is 1000M
	1 (Fiber port) Green	Blinking: data on TX/RX	
		Off: ports link down	
		On: ports link up	
	Blinking: data on TX/RX		
Power parameters			
Input voltage	12-58VDC, redundant power input		
Input current	0.2A Max		
Total power consumption	Full loading ≤2W		

Connector	Removable 4-pin terminal block
Reverse polarity protection	Support
Over-voltage protection	Support
<b>Switching features</b>	
Switching capacity	2G
Packet forwarding rate	2.97pps
MAC address table	8K
VLAN	4K
Buffer	1M
Forwarding delay	<5us
Jumbo Frame	Support 10Kbytes
MDX/MIDX	Support
Watchdog	Support
<b>Network Topology</b>	
Star topology	Support
Bus topology	Support
Tree Topology	Support
<b>Mechanical structure</b>	
Case protection	IP40
Installation method	Din-rail
Dimension(W*D*H)mm	30*85*85mm
Weight	0.2 kg
<b>Operating environment</b>	
Operating temperature	-40℃~+75℃
Storage/transportation temperature	-40℃~+85℃
Relative humidity	5%~95% (non-condensing)
Industrial Standard	Surge protection of power: IEC 61000-4-5 Level 3 (4KV/2KV) (8/20us)
	Surge protection of Ethernet ports: IEC 61000-4-5 Level 3 (4KV/2KV) (10/700us)
	DIP: IEC 61000-4-11 Level 3 (10V)

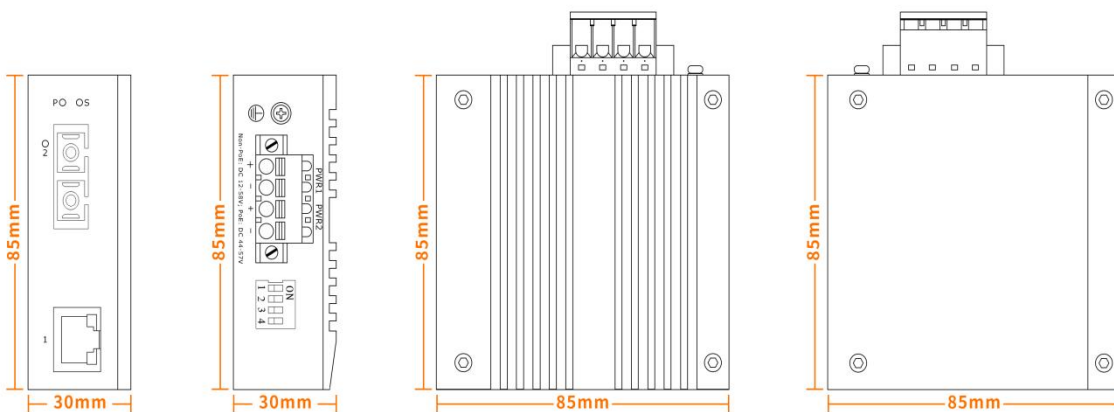
	ESD: IEC 61000-4-2 Level 4 (8K/15K)
	Shock: IEC 60068-2-27
	Free fall: IEC 60068-2-32
	Vibration: IEC 60068-2-6
<b>Certification</b>	CE/FCC/RoHS
<b>Warranty</b>	5 years

### Structure diagram

SFP model



SC/ST/FC model



## Order information

Model	Description
<b>DK-MC10G-E</b>	10/100/1000Base-T to 1000Base-X unmanaged compact size industrial media converter with 1*10/100/1000Base-X RJ45 port and 1*100/1000Base-X SFP slot, DC12-58V input, redundant dual power supply, Din-rail installation. Fiber port transmission distance depending on the SFP module; Operation temperature: -40°C~+75°C
<b>DK-MC10G-SC-E</b>	10/100/1000Base-T to 1000Base-X unmanaged compact size industrial media converter with 1*10/100/1000Base-X RJ45 port and 1*100/1000Base-X SC port, DC12-58V input, redundant dual power supply, Din-rail installation; Multi-mode/Single mode/ dual fiber/single fiber, 550m -100KM optional; Operation temperature: -40°C~+75°C
<b>DK-MC10G-FC-E</b>	10/100/1000Base-T to 1000Base-X unmanaged compact size industrial media converter with 1*10/100/1000Base-X RJ45 port and 1*100/1000Base-X FC port, DC12-58V input, redundant dual power supply, Din-rail installation; Multi-mode/Single mode/ dual fiber/single fiber, 550m -100KM optional; Operation temperature: -40°C~+75°C
<b>DK-MC10G-ST-E</b>	10/100/1000Base-T to 1000Base-X unmanaged compact size industrial media converter with 1*10/100/1000Base-X RJ45 port and 1*100/1000Base-X ST port, DC12-58V input, redundant dual power supply, Din-rail installation; Multi-mode/Single mode/ dual fiber/single fiber, 550m -100KM optional; Operation temperature: -40°C~+75°C