10/100/1000Base-T to 100/1000Base-X 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℃ ~+75℃

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℃ to 75℃ 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.
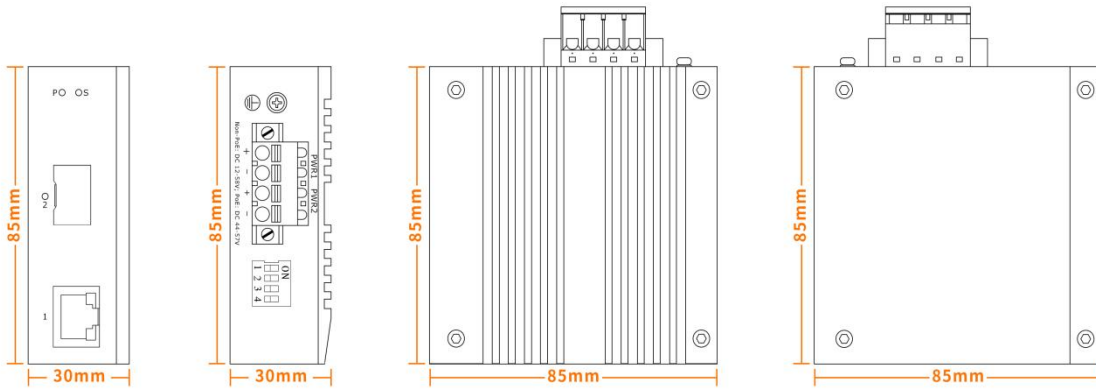
Technical specification

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	1. LFP 2. Flow control 3. Broadcast storm restrain 4. Fiber port 100/1000M selection		
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
		Blinking: data on TX/RX	
	1 (Fiber port) Green	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		

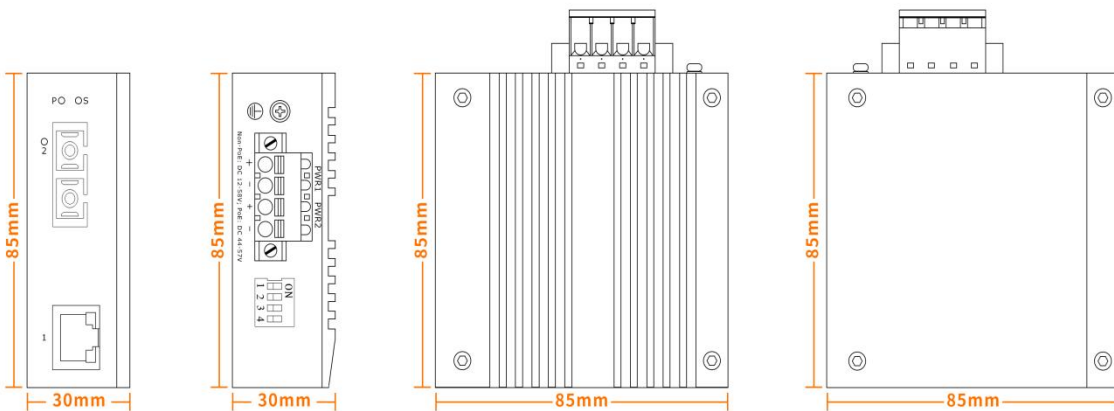|	
Reverse polarity protection	Support
Over-voltage protection	Support
Switching features	
Switching capacity	2G
Packet forwarding rate	2.97pps
MAC address table	8K
VLAN	4K
Buffer	1M
Forwarding delay	<5us
Jumbo Frame	Support 10Kbytes
MDX/MIDX	Support
Watchdog	Support
Network Topology	
Star topology	Support
Bus topology	Support
Tree Topology	Support
Mechanical structure	
Case protection	IP40
Installation method	Din-rail
Dimension(W*D*H)mm	30*85*85mm
Weight	0.2 kg
Operating environment	
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
Certification	CE/FCC/RoHS
Warranty	5 years

Structure diagram

SFP model

SC/ST/FC model

Order information

Model	Description
DK-MC10G-E	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℃～+75℃
DK-MC10G-SC-E	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℃～+75℃
DK-MC10G-FC-E	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℃～+75℃
DK-MC10G-ST-E	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℃～+75℃