10/100/1000M Industrial PoE Media Converter

DK-MC10GP-E Series

Features

➤ 1*10/100/1000Base-T RJ45 PoE port, 1*100/1000Base-X SFP(/SC/ST/FC optional) fiber port

➤ DC 44~57V input, redundant power supply with polarity reverse/over-voltage protection

➤ Complies with IEEE802.3af PoE and IEEE802.3at PoE+ standard

➤ Powerful Dip switch function:

　　1.LFP;　2.Fiber port 100/1000M selection;　3.250m long distance;　4.PoE watchdog

➤ 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-MC10GP-E series are unmanaged compact size industrial grade PoE media converter with 1-port 10/100/1000-T PoE and 1-port 100/1000Base-X fiber optical interfaces. They comply with IEEE802.3af, IEEE802.3at standard PoE protocol, the Max power consumption can reach 30W (PoE+). Moreover, they are featuring with LFP, fiber port 100/1000M selection, 250m long distance transmission and PoE watchdog function, which all can be configured by the Dip switch on the top panel.

DK-MC10GP-E series are also high cost-effective easy-to-use devices, which provide essential industrial Ethernet networking function, such as wide range power input 44-57VDC, 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.
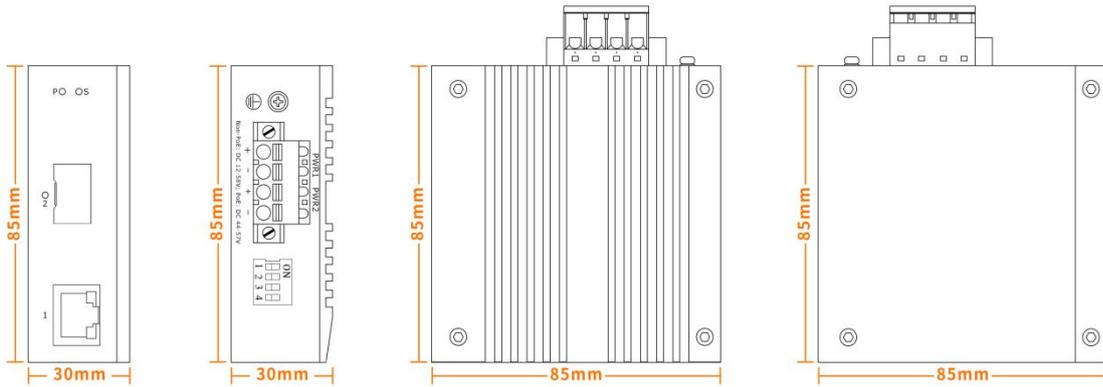
Technical specification

Model No.	DK-MC10GP-E		
Interface	Fiber port		Copper RJ45 port
	1		1
Ethernet	1*10/100/1000Base-T PoE 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 802.3af Power-Over-Ethernet IEEE 802.3at Power Over Ethernet plus PSE		
Dip Switch	1. LFP 2. Fiber port 100/1000M selection 3. 250m long distance mode 4. PoE watchdog		
LED Indicators	P(Power indicator) Green	Off: the device is power off or failed	
		On: the device power on is normal	
	S(PoE usage indicator) Red	Off: total PoE usage < rated 50%	
		Blinking: rated 50% < total PoE usage < rated 90%	
		On: total PoE usage≥rated 90%	
	1 (Copper port)	Green indicators	Yellow indicators
		Off: ports link down	Off: PoE not working
		On: ports link up	On: PoE working
		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	44-57VDC, redundant power input		

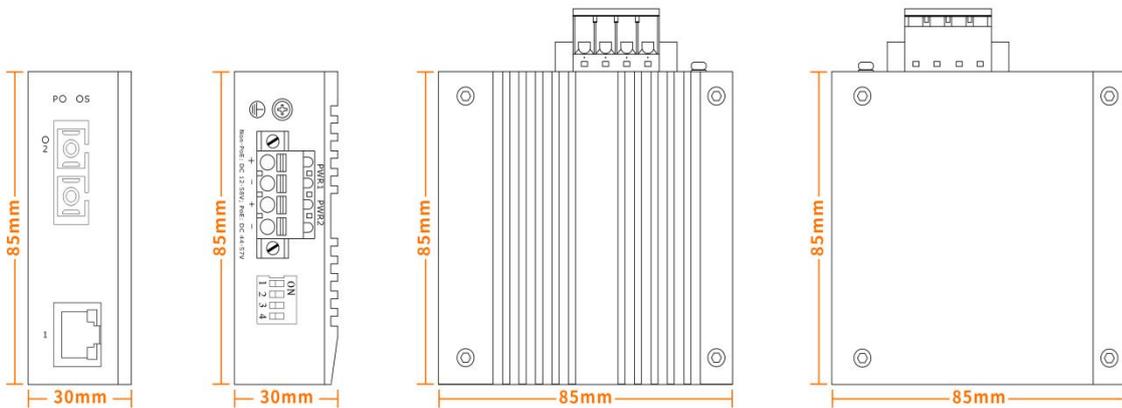|	
Input current	0.75A Max
Total power consumption	Full loading without PoE ≤ 2W PoE power budget ≤ 30W
Connector	Removable 4-pin terminal block
Reverse polarity protection	Support
Over-voltage protection	Support
Switching features	
Switching capacity	2G
Packet forwarding rate	2.97 Mpps
MAC address table	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-MC10GP-E	10/100/1000Base-T to 1000Base-X unmanaged compact size industrial PoE media converter with 1*10/100/1000Base-T RJ45 PoE port and 1*100/1000Base-X SFP slot, DC44-57V input, redundant dual power supply, Din-rail installation. Fiber port transmission distance depending on the SFP module; Operation temperature: -40℃～+75℃
DK-MC10GP-SC-E	10/100/1000Base-T to 1000Base-X unmanaged compact size industrial PoE media converter with 1*10/100/1000Base-T RJ45 PoE port and 1*100/1000Base-X SC port, DC44-57V input, redundant dual power supply, Din-rail installation; Multi-mode/Single mode/ dual fiber/single fiber, 550m -100KM optional; Operation temperature: -40℃～+75℃
DK-MC10GP-FC-E	10/100/1000Base-T to 1000Base-X unmanaged compact size industrial PoE media converter with 1*10/100/1000Base-T RJ45 PoE port and 1*100/1000Base-X FC port, DC44-57V input, redundant dual power supply, Din-rail installation; Multi-mode/Single mode/ dual fiber/single fiber, 550m -100KM optional; Operation temperature: -40℃～+75℃
DK-MC10GP-ST-E	10/100/1000Base-T to 1000Base-X unmanaged compact size industrial PoE media converter with 1*10/100/1000Base-T RJ45 PoE port and 1*100/1000Base-X ST port, DC44-57V input, redundant dual power supply, Din-rail installation; Multi-mode/Single mode/ dual fiber/single fiber, 550m -100KM optional; Operation temperature: -40℃～+75℃