

### 2\*10/100Base-TX PoE to 2\*100Base-FX

# Compact Industrial PoE Media Converter DK-MC10F-2FP2FS-E



#### **Features**

- > 2\*10/100Base-TX RJ45 PoE ports, 2\*100Base-FX SFP fiber ports
- > 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. Fiber redundant; 2. Flow control; 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°C ~+75°C

#### Overview

The DPTEK DK-MC10F-2FP2FS-E is the unmanaged industrial grade PoE media converter with 2-port 10/100Base-TX PoE and 2-port 100Base-FX fiber optical interfaces. It complies with IEEE802.3af, IEEE802.3at standard PoE protocol, the Max power consumption can reach 30W (PoE+) per port. Moreover, it is featuring with fiber redundant, flow control, 250m long distance transmission mode and PoE watchdog function, which all can be configured by the Dip switch on the top panel.

DK-MC10F-2FP2FS-E is also a high cost-effective easy-to-use device, which provides 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 housing with Din-rail installation, wide operation temperature from -40°C ~+75°C as well as high-level EMI/EMC capability and so on. It is 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-MC10F-2FP2FS-E				
Interface	Fiber ports		Copper RJ45 ports		
	2		2		
Ethernet	2*10/100Base-TX PoE 2*100Base-FX SFP				
Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3x Full-Duplex Flow Control IEEE 802.3az Energy Efficient Ethernet IEEE 802.3af Power-Over-Ethernet IEEE 802.3at Power Over Ethernet plus PSE				
Dip Switch	<ol> <li>Fiber redundant</li> <li>Flow control</li> <li>250m long distance mode</li> <li>PoE watchdog</li> </ol>				
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%			
	1-2(Copper ports)	Green ind	licators	Yellow indicators	
		Off: ports	link down	Off: PoE not working	
		On: ports	link up	O. D. F	
		Blinking:	data on TX/RX	On: PoE working	
	3-4 ( Fiber ports) Green	Off: ports link down			
		On: ports link up			
		Blinking: data on TX/RX			
Power parameters					
Input voltage	44-57VDC, redundant power input				

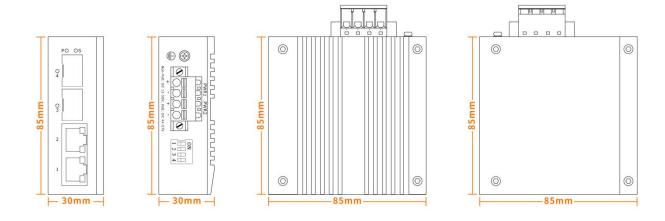


Input current	1.5A Max			
Total power consumption	Full loading without PoE ≤ 3W PoE power budget ≤ 60W			
Connector	Removable 4-pin terminal block			
Reverse polarity protection	Support			
Over-voltage protection	Support			
Switching features				
Switching capacity	0.8G			
Packet forwarding rate	1.9 Mpps			
MAC address table	8K			
VLAN	4K			
Buffer	1M			
Forwarding delay	<10us			
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	0.22kg			
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, (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



#### **Order information**

Model	Description
DK-MC10F-2FP2FS-E	10/100Base-TX to 100Base-FX unmanaged compact industrial PoE media converter with 2*10/100Base-TX PoE ports and 2*100Base-FX SFP slots, complies with IEEE802.3af, IEEE802.3at standard, DC44-57V, redundant dual power supply, Din-rail installation. Fiber port transmission distance depending on the SFP module; Operation temperature: -40°C $\sim$ +75°C