Compact size 10/100M Industrial PoE Media Converter LT-IMC30FP-E Series



Features:

- > 1*10/100Base-TX RJ45 PoE port, 1*100Base-FX 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. 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 SmartByte LT-IMC30FP-E series are unmanaged industrial grade media converter with 1-port 10/100Base-TX PoE and 1-port 100Base-FX fiber optical interface. They complies with IEEE802.3af, IEEE802.3at standard PoE protocol, the Max power consumption can reach 30W (PoE+) Moreover, they are featuring with LFP, flow control, 250m long distance transmission mode and PoE watchdog function, which all can be configured by the Dip switch on the top panel.

LT-IMC30FP-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 $^{\circ}$ C $^{\sim}$ +75 $^{\circ}$ 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

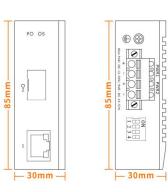
| Model No. | LT-IMC30FP-E | | |
|----------------|--|---|------------------|
| Interface | Fiber port | | Copper RJ45 port |
| | 1 | | 1 |
| Ethernet | 1*10/100Base-TX PoE 1*100Base-FX SFP (SC/ST/FC optional) | | |
| Standard | IEEE 802.3 10Base-T Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3x Full-Duplex Flow Control IEEE 802.3af Power-Over-Ethernet IEEE 802.3at Power Over Ethernet plus PSE | | |
| Dip Switch | LFP Flow control 250m long distance mode PoE watchdog | | |
| LED Indicators | P(Power indicator) Green | Off: the device is power off or failed | |
| | | On: the device power on is normal | |
| | | Off: total PoE usage < rated 50% | |
| | S(PoE usage indicator) Red | Blinking: rated 50% < total PoE usage < rated 90% | |
| | | On: total PoE usage≥rated 90% | |

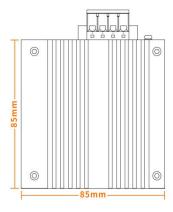
| | | | Yellow indicators | |
|-----------------------------|--|-------------------------|----------------------|--|
| | 1/(2-2-2-2-2-1) | Off: ports link down | Off: PoE not working | |
| | 1 (Copper port) | On: ports link up | | |
| | | Blinking: data on TX/RX | On: PoE working | |
| | Off: ports link down | | | |
| | 2 (Fiber port) Green | 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 | 0.4G | | | |
| Packet forwarding rate | 0.59Mpps | | | |
| 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 | | | |
| | 1 | | | |

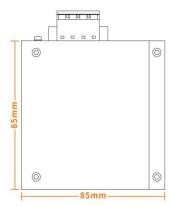
| Bus topology | Support | | |
|------------------------------------|---|--|--|
| Tree Topology | Support | | |
| Mechanical structure | | | |
| Case protection | IP40 | | |
| Installation method | Din-rail | | |
| Dimension(W*D*H)mm | 30*85*85mm | | |
| Weight | 0.2 kg | | |
| Operating environment | | | |
| 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 | CCC/CE/FCC/RoHS | | |
| Warranty | 5 years | | |
| | | | |

Structure diagram

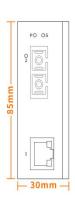
SFP model



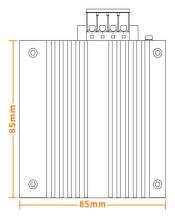


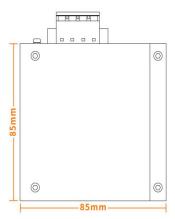


SC/ST/FC model











Order information

| Model | Description |
|-----------------|--|
| LT-IMC30FP-E | 10/100Base-TX to 100Base-FX unmanaged compact size industrial PoE media converter with 1*10/100Base-TX RJ45 PoE port and 1*100Base-FX SFP slot, DC44-57V input, redundant dual power supply, Din-rail installation. Fiber port transmission distance depending on the SFP module; Operation temperature: -40 $^{\circ}$ C $^{\circ}$ +75 $^{\circ}$ C |
| LT-IMC30FP-SC-E | 10/100Base-TX to 100Base-FX unmanaged compact size industrial PoE media converter with 1*10/100Base-TX RJ45 PoE port and 1*100Base-FX SC port, DC44-57V input, redundant dual power supply, Din-rail installation; Multi-mode/Single mode/ dual fiber/single fiber, 2KM -120KM optional; Operation temperature: -40 $^{\circ}$ $^{\circ}$ +75 $^{\circ}$ |
| LT-IMC30FP-FC-E | 10/100Base-TX to 100Base-FX unmanaged compact size industrial PoE media converter with 1*10/100Base-TX RJ45 PoE port and 1*100Base-FX FC port, DC44-57V input, redundant dual power supply, Din-rail installation; Multi-mode/Single mode/ dual fiber/single fiber, 2KM -120KM optional; Operation temperature: -40 $^{\circ}$ $^{\circ}$ +75 $^{\circ}$ |
| LT-IMC30FP-ST-E | 10/100Base-TX to 100Base-FX unmanaged compact size industrial PoE media converter with 1*10/100Base-TX RJ45 PoE port and 1*100Base-FX ST port, DC44-57V input, redundant dual power supply, Din-rail installation; Multi-mode/Single mode/ dual fiber/single fiber, 2KM -120KM optional; Operation temperature: -40 $^{\circ}\text{C}$ \sim +75 $^{\circ}\text{C}$ |