Iinfinique™

IMC-SM2E1FLC-SP

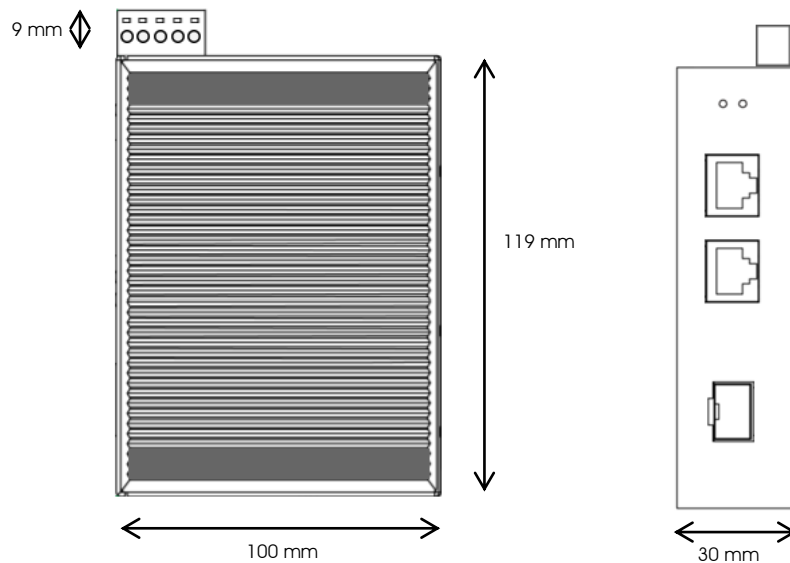Gigabit Ethernet to Fiber Industrial PoE+ Media Convertor, 2 Ethernet, 1 SFP Ports

The IMC-SM2E1FLC-SP is a full gigabit industrial PoE+ Ethernet to Fiber media convertor designed to provide reliable and stable operation in harsh environments. Equipped with two 10/100/1000Base-T Ethernet ports and one 1000Base-X SFP port it can be easily mounted on a DIN-Rail or equipment box. The maximum PoE power supplied to each device connect to Ethernet port is 30W. It can automatically detect and recognize power compliant devices that meet the IEEE 802.3af/at standard. Supports PoE and PoE+ devices such as, CCTV Camera, Wireless AP, Webcam, VoIP and industrial sensor.

Available as standalone or line card types, it is easy to install with features such as plug-and-play, auto-negotiation and link down detection. It can be used in a wide range of applications such as intelligent transportation, rail transit, power industry, mining, petroleum, shipping and metallurgy.

Features and Benefits

- **Gigabit Ethernet**
  Gigabit Ethernet and SFP ports offers high speed conversion between serial interfaces and supports full and half duplex operations based on IEEE802.3x
- **Network Extension**
  Meets the network extension needs for Ethernet and Fiber interfaces.
- **Industrial Grade**
  DIN-Rail mountable, designed for harsh environments, can operate in high temperatures and provides EMI immunity
- **Intelligent PoE Power Supply**
  Priority PoE System, that supplies power first to high priority port when the power budget is insufficient
- **Stable and Reliable**
  Aluminum Enclosure, Redundant Power Inputs, Low Power Consumption, Quiet Operation, LED Indicators, Port Lightning Protection,
- **Applications**
  Intelligent transportation, rail transit, power industry, mining, petroleum, shipping and metallurgy

CONSTRUCTION

IMC-SM2E1FLC-SP

Gigabit Ethernet to Fiber Industrial PoE+ Media Convertor, 2 Ethernet, 1 SFP Ports

ETHERNET INTERFACE

10/100/1000BaseT RJ45 Port	2, Data and PoE/PoE+
100/1000Base SFP Port	1, Data
Magnetic Isolation Protection	1.5kV (built-in)
Ethernet Port Feature	10/100/1000Base-T, Auto Sensing, Full/Half Duplex MDI/MDI-X Self Adaption
SFP Port Feature	Gigabit SFP, Singlemode, Multimode, Single or Dual Fiber
PoE Standard	IEEE802.3af/at
Forwarding Mode	Store and Forward at Full Wire Speed
Switching Capacity	8Gbps
Forwarding Rate @ 64 byte	4.46Mpps
MAC	8K
Buffer Memory	1M

ELECTRICAL

Power Consumption	Standby 3W, Operational 35W
PoE Power per Port	30W
Power Source	DC12V-48V
Power Point	2 x V+, V– Redundant DC
Power Connector	5 Pin Industrial Phoenix Terminal
Power Connector	Default:1/2 (+), 3/6 (-) optional: 4/5(+),7/8(-)
Anti-Reverse Protection	Supported
Overload Current Protection	Supported
LED Indicator	Power: Green, Network Link: Yellow, PoE: Green

ENVIRONMENTAL

Operating Temperature (C)	-40 to +80
Storage Temperature	-40 to +85
Operating Humidity	5% - 95% non condensing

MECHANICAL

Dimensions (mm)	100 (w) x 119 (h) 30(d)
Weight (g)	350
Housing	Aluminum Die Cast
Finish	Black Power Coat, RAL 9005
Installation	Din Rail Mounting / Equipment Box
Lightning Protection	6KV 8/20us
Ingress Protection Rating	IP40

MTBF

Time	539,608 hrs

OPTICAL FIBER

	Multimode	Singlemode
Wavelength	850nm	1310nm
Tx Output (dBm)	-3 to -10	-3 to –9
Rx Sensitivity (dBm)	-3 to –20	-3 to –21
Link Budget (dBm)	10	12
Typical Distance	500m	20km

NETWORK PROTOCOL

IEEE802.3 10BASE-T; IEEE802.3i 10Base-T;
IEEE802.3u 100Base-TX;
IEEE802.3ab 1000Base-T
IEEE802.3z 1000Base-X
IEEE802.3x

STANDARDS COMPLIANCE

IEC61000-4-2 ESD:±8kV contact discharge,±15kV air discharge
IEC61000-4-3 RS:10V/m(80~1000MHz)
IEC61000-4-4 EFT: power cable:±4kV; data cable:±2kV
IEC61000-4-5 Surge: power cable:CM±4kV/DM±2kV; data cable:±4kV
IEC61000-4-6 Radio Frequency Transmission:10V(150kHz~80MHz)
IEC61000-4-8 Power Frequency Magnetic Field:100A/m;1000A/m ,1s to 3s
IEC61000-4-9 Pulsed Magnet Field:1000A/m
IEC61000-4-10 Damped Oscillation:30A/m 1MHz
IEC61000-4-12/18 Shockwave: CM 2.5kV,DM 1kV
IEC61000-4-16 Common Mode Transmission:30V; 300V,1s

Mechanical	IEC60068-2-6 Anti Vibration IEC60068-2-27 Anti Shock IEC60068-2-32 Free Fall
Emissions	CCC; CE FCC Part 15 Subpart B Class B EN 55022:2010 IC ICES-003 Class B IEC61000-6-2 Common Industrial Standard
Immunity	EN 55024:2010
Safety	EN 60950-1, UL 60950-1, EU: 2001/95/EC GPSD RoHS

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
IMC-SM2E1FLC-SP	Infinique Industrial PoE+ Ethernet to Fiber Media Converter, 2 x 10/100/1000 Base-TX PoE/PoE+ Ports, 1 x 1000 Base-FX Port, Singlemode, LC, 20 km, DIN-Rail Mount, Excluding Power Supply
IMC-MM2E1FLC-SP	Infinique Industrial PoE+ Ethernet to Fiber Media Converter, 2 x 10/100/1000 Base-TX PoE/PoE+ Ports, 1 x 1000 Base-FX Port, Multimode, LC, 500 m, DIN-Rail Mount, Excluding Power Supply
IMC-PWR-48-60	Infinique Industrial Power Supply, 48VDC, 60W, DIN-Rail Mount

Infinique™ Infinique, a Canadian company is a manufacturer of high performing end-to-end solutions in copper, fiber and video surveillance systems. For more information visit our website at www.infinique.com or email us at sales@infinique.com.