

# IMC-SM1E1FLC-SP

Ethernet to Fiber Industrial Media Converter 1 Ethernet, 1 SC Duplex Port

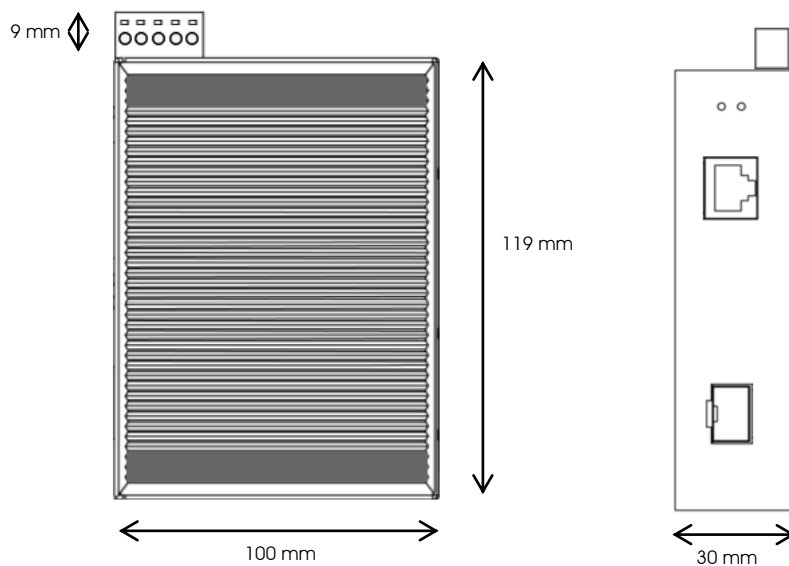
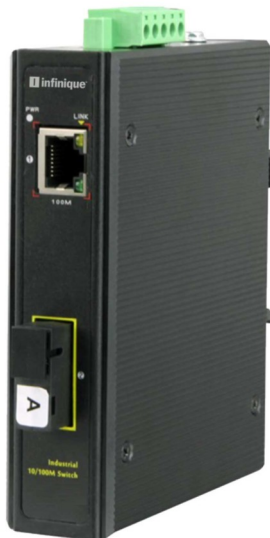
The IMC-SM1E1FLC-SP is an industrial Ethernet to fiber media converter designed to provide reliable and stable operation in harsh environments. Equipped with one 10/100Base-T RJ45 port and one SC Duplex Adapter port it can be easily mounted on a DIN rail or equipment box.

Available as standalone type, these are 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

- Ethernet to Fiber**  
 Ethernet and SC 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
- 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-SM1E1FLC-SP

Ethernet to Fiber Industrial Media Converter 1 Ethernet, 1 SC Duplex Port

ETHERNET INTERFACE	
10/100BaseT RJ45 Port	1, Data
155M Uplink SC Port	1, Singlemode, Duplex
Magnetic Isolation Protection	1.5kV (built-in)
Ethernet Port Feature	10/100Base-T, Auto Sensing, Full/Half Duplex MDI/MDI-X Self Adaption
SC Port Distance	1310nm: 0 to 40 km, 1550nm: 0 to 120 km
Forwarding Mode	Store and Forward at Full Wire Speed
Switching Capacity	1.6Gbps
Forwarding Rate @ 64 byte	0.30Mpps
MAC	1K
Buffer Memory	768K
Jumbo Frame	1536 bytes
ELECTRICAL	
Power Consumption	Standby 3W, Operational 5W
Power Source	DC12V-48V
Power Point	2 x V+, V- Redundant DC
Power Connector	5 Pin Industrial Phoenix Terminal
Power Connector Configuration	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, Fiber Port: 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)	500
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; IEEE802.3u 100Base-FX; 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 GSPD RoHS	

ORDERING INFORMATION	
PART NUMBER	DESCRIPTION
IMC-SM1E1FLC-SP	Infinique Industrial Ethernet to Fiber Media Converter, 1 x 10/100Base-TX, 1 x SC Port, Singlemode, SC Duplex, 20KM, Din-Rail Mount, Excluding Power Supply
IMC-MM1E1FLC-SP	Infinique Industrial Ethernet to Fiber Media Converter, 1 x 10/100Base-TX, 1 x SC Port, Multimode, SC Duplex, 500M, Din-Rail Mount, Excluding Power Supply
IMC-PWR-12-12	Infinique Industrial Power Supply, 12VDC, 12W, DIN-Rail Mount



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](http://www.infinique.com) or email us at [sales@infinique.com](mailto:sales@infinique.com).