

## Industrial EtherCAT Media Converter Kit (IECC-210T + IECC-210R)



### Powering the Digital Transformation with EtherCAT

PLANET IECC-210-KIT (IECC-210T +IECC-210R) is an industrial EtherCAT Media Converter equipped with the EtherCAT protocol for today's distributed industrial applications. The EtherCAT-capable IECC-210T for Industrial Fast Ethernet serves as media converter from copper to optical fiber while the IECC-210R does the opposite. It can be diagnosed as two separate EtherCAT devices. With the advantage of fiber optic cabling, the data transmission distance of the IECC-210T and the IECC-210R can be extended to 60km (Depending on the ability of SFP module). Their compact size and DIN-rail mounting make installation in a cabinet easy. Pluggable terminal blocks and LED indicator help users to maintain and set up their system.



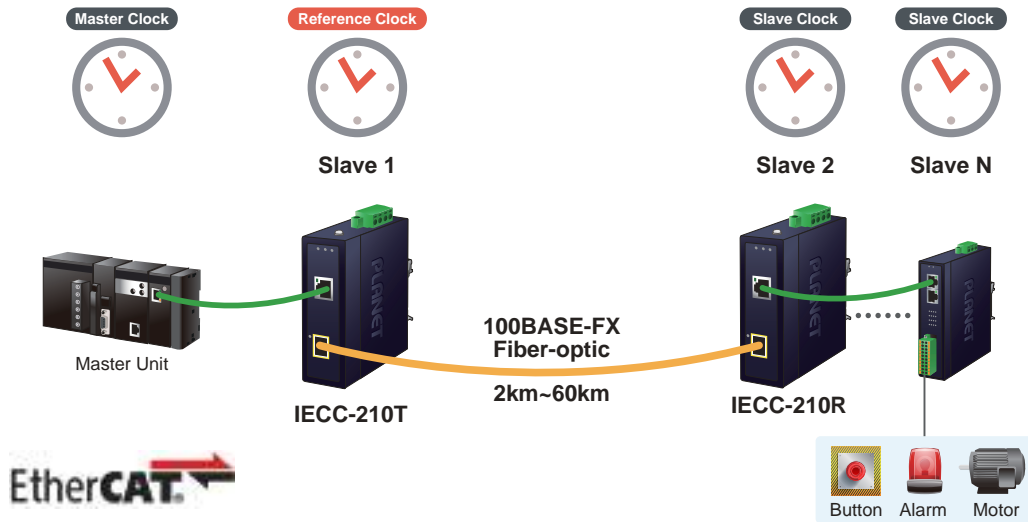
### Flexible Installation

The IECC-210-KIT is an ideal media converter solution which provides quick installation, real-time connection status monitoring, wide-ranging power input and wide operating temperature to improve work efficiency, making them suitable for the harsh environment. Besides, both of them come with one 100BASE-TX RJ45 port and one 100BASE-FX SFP port. Through the EtherCAT technology, a network of up to 65,535 devices can be supported without the limitation of the type of topology -- line, bus, tree, star or any arrangement - -being used.

- 1 x 100BASE-TX RJ45 bus interface
- 1 x 100BASE-FX SFP interface
- LED indicators for the input status
- 9 ~ 48V DC wide input voltage range
- Supports EtherCAT Distributed Clock (DC) mode
- EtherCAT conformance test tool verified

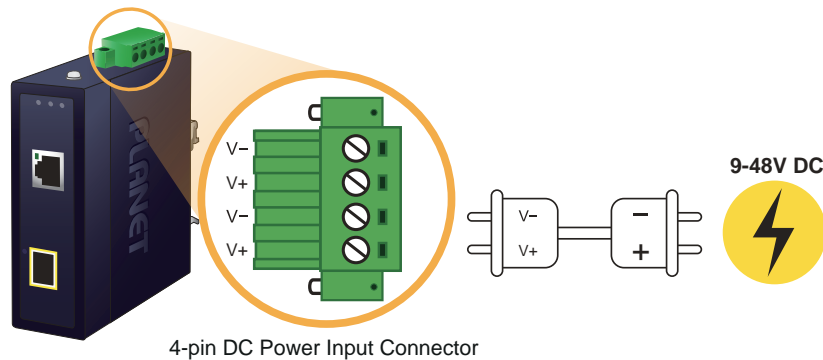
**Synchronization**

An EtherCAT slave is an electronic device that carries out cyclical sequences of calculations and/or data copying tasks at a certain interval (cycle). The EtherCAT slave working cycle (e.g. in the range of a few  $\mu s$  up to several ms) can be derived from different sources. EtherCAT node can measure time difference between leaving and returning frame. With distributed clocks, EtherCAT can realize a precise synchronization time of  $<1\mu s$  between each slave module.



**Convenient and Reliable Power System**

The IECC-210-KIT is equipped with one 4-pin DC power input connector with screws for power supply installation. With power magnetic protection design, it can avoid the device burnout due to wrong wiring. In addition, it also possesses an integrated power supply source with wide-ranging voltages (9 to 48V DC) for worldwide high availability applications.



**Environmentally Hardened Design**

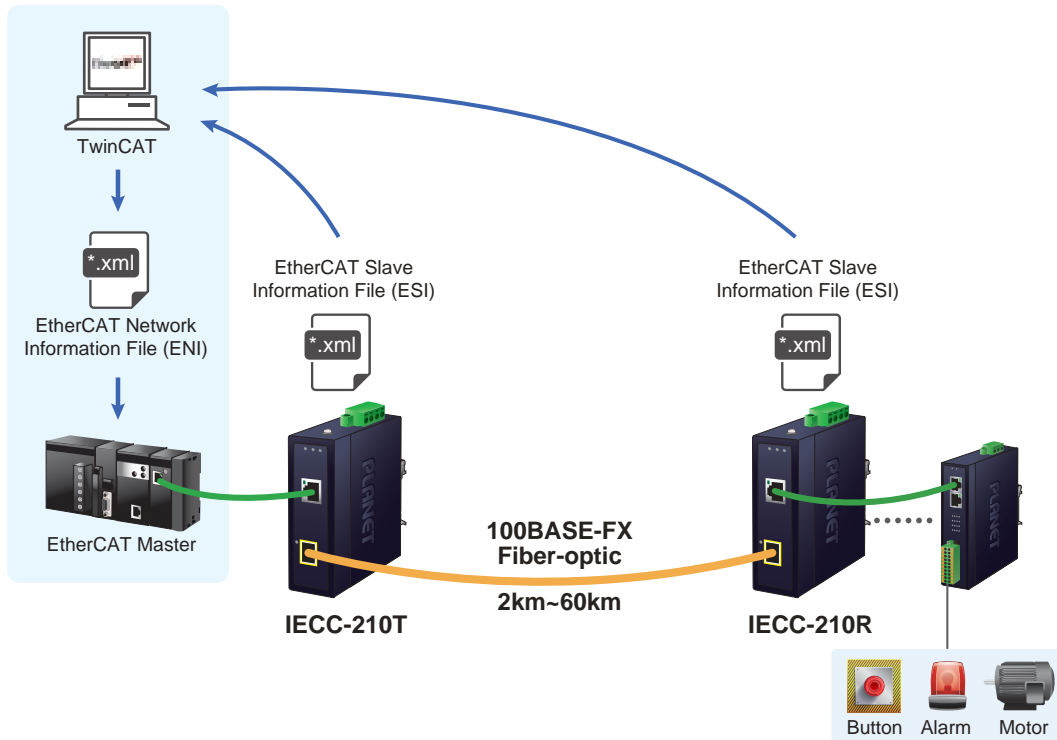
With the IP30 metal industrial case, the IECC-210-KIT provides a high level of immunity against electromagnetic interference and heavy electrical surges which are usually found on plant floors or in curb-side traffic control cabinets without air conditioning. It features a ventilated construction in which a cooling fan is not necessary, thereby making its operation noiseless. Being able to operate under the temperature range from  $-40$  to  $75$  degrees C, the IECC-210-KIT can be placed in almost any difficult environment.



## Applications

### Industrial-grade EtherCAT Media Converter for Factory Automation

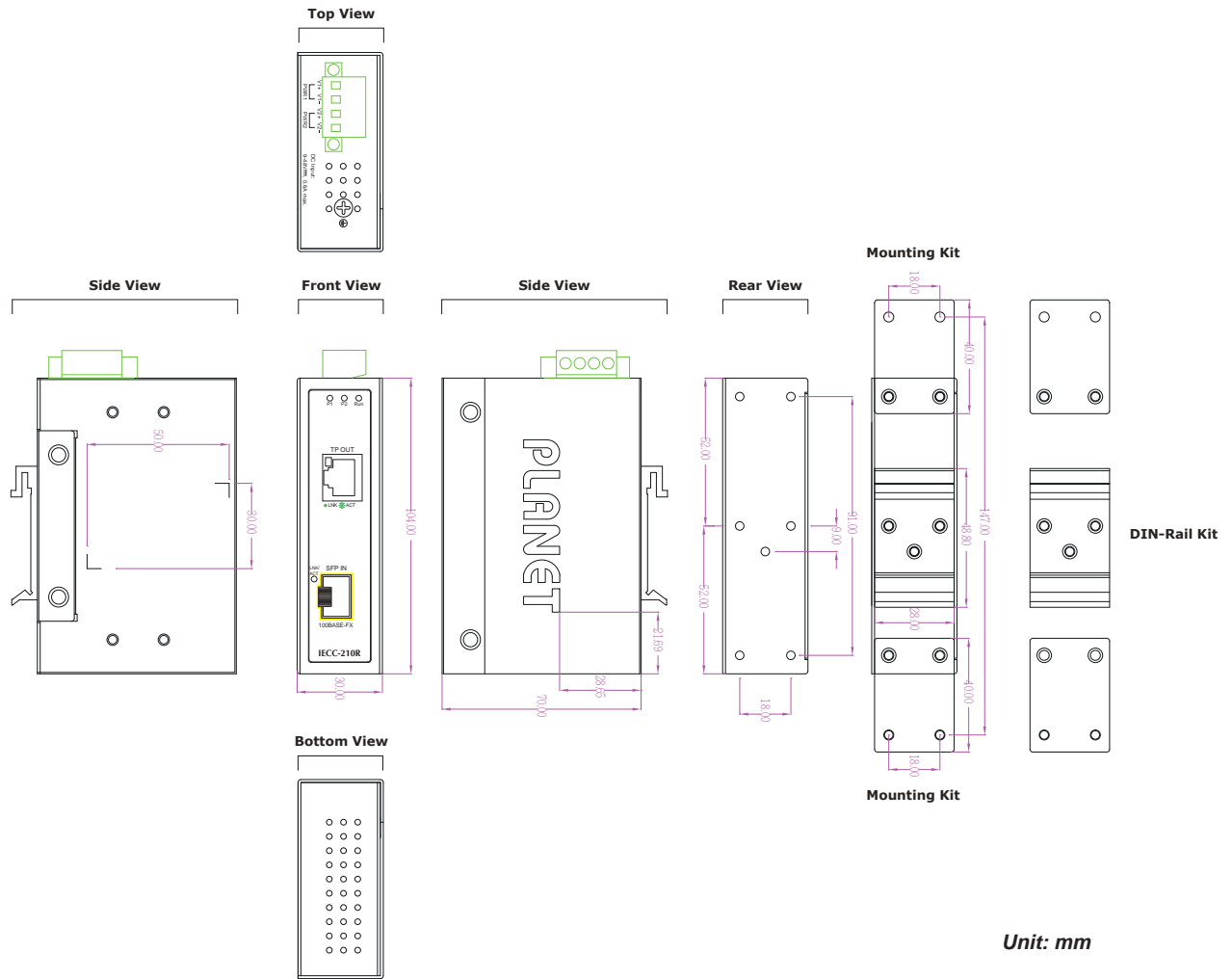
IECC-210-KIT is an EtherCAT Media Converter for distributed industrial applications. The kit with fiber optic can extend distance for data transmission and provides powerful features in a compact size. DIN-rail design and daisy-chain wiring powered by EtherCAT technology make it easy to install the modules in the field. With the standard ESI file, users can always find suitable I/O modules for their high-speed EtherCAT-based applications.



## Specifications

Product		IECC-210-KIT
<b>Communication Interface</b>		
Copper	Port	1 x 100BASE-TX RJ45 port
	Distance between Stations	max. 100 m (100BASE-TX)
	Data Transfer Medium	Ethernet/EtherCAT cable (min. cat5), shielded
Fiber	Port	1 x 100BASE-FX SFP port
	Distance between Stations	Depending on the ability of SFP module
	Data Transfer Medium	Depending on the ability of SFP module
<b>EtherCAT</b>		
Protocol	EtherCAT	
<b>Power</b>		
Input Voltage Range	9~48V DC	
Power Consumption	1.92W max.	
<b>Mechanical</b>		
Dimensions (W x D x H)	33 x 70 x 104mm	
Installation	DIN-rail and wall mounting	
Case Material	IP30 metal	
<b>Environment</b>		
Operating Temperature	-40~75 degrees C	
Storage Temperature	-40~75 degrees C	
Relative Humidity	5~95% (non-condensing)	

## Dimensions



## Ordering Information

IECC-210-KIT	Industrial EtherCAT Media Converter Kit (IECC-210T + IECC-210R)
IECC-210T	Industrial EtherCAT Media Converter ( RJ45 IN, SFP OUT)
IECC-210R	Industrial EtherCAT Media Converter ( RJ45 OUT, SFP IN)

## Related Products

IECS-1116-DO	Industrial EtherCAT Slave I/O Module with Isolated 16-ch Digital Output
IECS-1116-DI	Industrial EtherCAT Slave I/O Module with Isolated 16-ch Digital Input
IMG-2105AT / IMG-2102T / IMG-2102TS	IMG-2105AT / IMG-2102T / IMG-2102TS
IMG-2400T	Industrial 4-Port RS232/422/485 Modbus Gateway
MFB-Series Transceiver	100BASE-FX SFP Transceiver

## Accessories

PWR-240-48	240W 48V DC Single Output Industrial DIN-rail Power Supply (-20 ~ 70 degrees C)
PWR-480-48	480W 48V DC Single Output Industrial DIN-rail Power Supply (-20 ~ 70 degrees C)

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IECC-210-KIT