

# Current Sensor IT-E190 Series User's Manual



Model: IT-E190-6A/IT-E190-15A/ IT-E190-25A/IT-E190-40A/ IT-E190-60A Version: V1.0



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IT-E190-402230

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A CAUTION sign denotes a hazard. It calls attention to an operating procedure or practice that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a CAUTION sign until the indicated conditions are fully understood and met.

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A NOTE sign denotes important hint. It calls attention to tips or supplementary information that is essential for users to refer to.



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## I About IT-E190

IT-E190 Series current sensor is an optional accessory provided by ITECH, which is mainly used for expanding the current measurement scope of ITS9500 power supply test system and IT9121 power meter. Features:

- small size, large measurement scope
- non-contact measurement

IT-E190 Series Model Selection Table:

Model	Conversion ratio (Current)	Conversion ratio (Voltage)
IT-E190-6A	1.0419mA/A	104.2mV/A
IT-E190-15A	0.416mA/A	41.67mV/A
IT-E190-25A	0.25mA/A	25mV/A
IT-E190-40A	0.125mA/A	12.5mV/A
IT-E190-60A	0.13333mA/A	13.333mV/A

## **II** Dimension











Unit: mm

## **III** IT-E190 Appearance Introduction

## (1). Introduction of front panel



- 1. Input interface of power supply
- 2. DB9 terminal

## (2). Introduction of rear panel



Diagram of rear panel (when terminal protection cover is removed) is shown below:





 Input terminal, for inputting current. Pay attention to polarity during test. Reverse connection may cause negative value.

## ${\rm IV}~$ IT-E190 Function Introduction

## (1). Introduction of Front Panel Terminals



## Input Interface of Power Supply

External power supply may be available if power meter is provided. Power supply is individually supplied in package. Power supply specification is as follows:

Input voltage: 220VAC;

Output voltage range: DC5V-DC9V;

Output current: 1.2A (MAX);

Output polarity: Internal + (Positive) External - (Negative).

## **DB9** Terminal

DB9 terminal is defined as follows:



Base pin number	Description
1	+12V
2	GND, grounding
3	-12V



4	Signal ground
5	Voltage signal output
6	No conjunction
7	Current signal output
8	No conjunction
9	No conjunction

If ITS9500 test system is used, terminals 1, 2 and 3 are power supply terminals, which are used in system power supply; when a power meter is used, the above terminals are not required for power supply.

## (2). Connecting Current Sensor

### Connecting ITS9500 Test System

1. When terminal protection cover at the IT-E190 rear panel is removed, connect the input terminal to the test circuit in series.



2. Connect the IT-E190 DB9 terminals to the current measurement terminal at the IT9501 front panel (I-Sense) through standard test lines.





#### **Connecting IT9121 Power Meter**

1. To connect working power supply, insert the standard power line to the power input terminal. Connection method as follows:



2. When terminal protection cover at the IT-E190 rear panel is removed, connect the input terminal to the test circuit in series.



3. Connect the IT-E190 DB9 terminal to the external sensor input interface of the power meter through DB9 extension.



For interface instructions of the current sensor of power meter, refer to IT9121 Installation Instructions.





## **Contact US**

Thank you for purchasing ITECH products. If you have any doubt about this product, please contact us as follow.

- 1. Please refer to the CD-ROM of related user's manual in package.
- 2. Click <u>www.itechate.com</u> or scan the right two-dimension code to visit the ITECH website.
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