STP

3 in 1 RJ45 port Current Sensor

- 3 IN 1 current sensor with RJ45 port much easy to install
- High linearity from 1% to 100% F.S.
- Wide dynamic range
- Very useful with large size or awkward shaped conductors or in places with limited access
- Excellent degree of rejection to the external current conductor

Feature

STP is 3 in 1 RJ45 port current sensor series,it includ 333mV output Split core Current transformer and Flexible rogowski coil both.Especially connect to ME238.Much easy to install compare to other traditional power meter.

Advantage

- Calibrated to 0.5%
- Much easy to install through RJ45
- Easy to fixed on bus-bar or cable by cable ties
- Very competitive price

Related Products

ME238

Applications

- Measuring devices, lab instrumentation
- Power monitoring & control systems
- DC ripple measurement
- Harmonics and transients monitoring
- Power meter,Power analyzer sensor

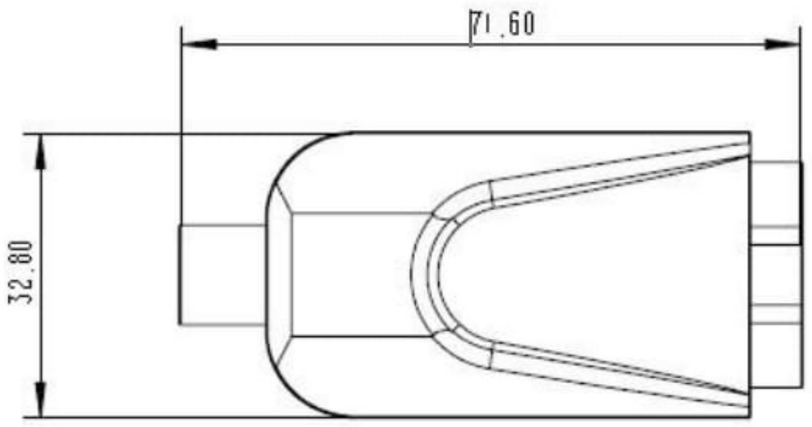
Specification

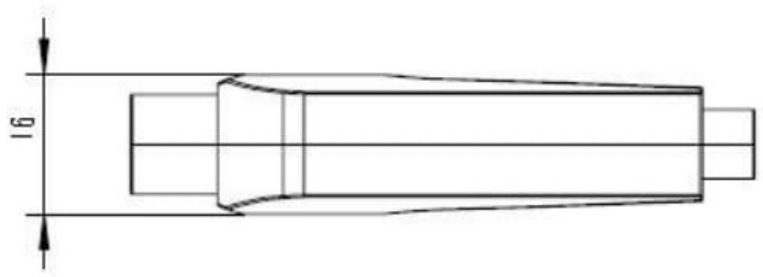
MODEL	STP-5	STP-100	STP-100R	STP-600	STP-2.5K	STP-6K
Current Sensor type	Split core Current transformer		Rogowski coil+Integrator (power 3.3V)	Rogowski coil		
Sensor Model No.	SCT-010	SCT-016	MRC-24	MRC-36	NRC-150	NRC-200
Window size	10mm	16mm	24mm	36mm	150mm	200mm
Rated current	5A	100A	100A	600A	2500A	6000A
Rated ratio	5A/333mV	100A/333mV	100A/333mV	50mV/kA@ 50Hz	85mV/kA@ 50Hz	50mV/kA @50Hz
Weight	Approx 200g	Approx 230g	Approx 490g	Approx 490g	Approx 520g	Approx 530g
Maximum current measurable	7.5A	150A	150A	620A	2900A	10000A
Sensor Cable length	1meter		2meter			
RJ45 Cable length	0.3meter					
Read Accuracy	<0.5% from 1% to 100% F.S. (central position, 25℃)					
Temperature	Calibrated 300ppm/C					
Output on 0A （zero drift）	≤0.05mV					
Phase error	⩽0.5°					
Linearity	±0.2% of reading					
Bandwidth	1Hz to 10kHz(-3dB)					
Operating temperature	-30℃ to 80℃					
Storage temperature	-40℃ to 90℃					
REMARK	**Choice STP-100R when STP-100 can't not be easy to install**					
Other requirements, please contact us to OEM.						

Connection Photo

STP-05	STP-100
	
STP-100R	STP-600
	
STP-2.5K	STP-6K
	

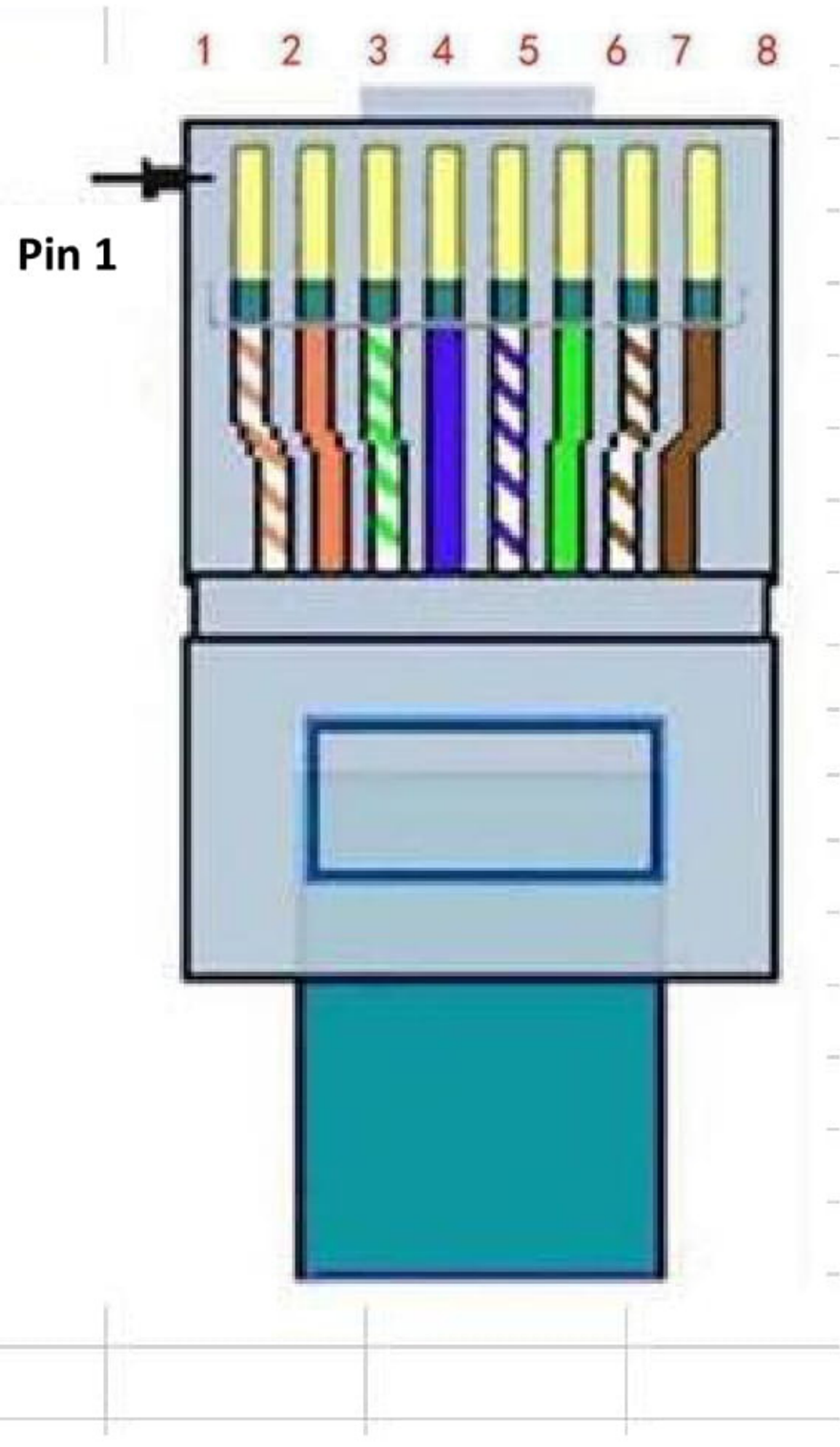
Size Diagram





RJ45 Joint Definition：

RJ45 PLUG



Pin 1	Phase L1(-)
Pin 2	Phase L1(+)
Pin 3	Shield （or GND）
Pin 4	Phase L2(-)
Pin 5	Phase L2(+)
Pin 6	Shield （or Power+）
Pin 7	Phase L3(-)
Pin 8	Phase L3(+)

Safety and warning notes

In order to guarantee safe operation of the transducer and to be able to make proper use of all features and functions,please read these instructions thoroughly!Safe operation can only be guaranteed if the transducer is used for the purpose it has been designed for and within the limits of the technical specifications.Ensure you get up-to-date technical information that can be found in the latest associated datasheet under **www.elsterinstruments.com**

Caution!Risk of danger

Ignoring the warnings can lead to serious injury and/or cause damage!

The electric measuring transducer may only be installed and put into operation by qualified personnel that have received an appropriate training,The corresponding national regulations shall be observed during installation and operation of the transducer and any electrical conductor.The transducer shall be used in electric/electronic equipment the respect to applicable standards and safety requirements and in accordance with all the related systems and components manufacturers' operating instructions.

Caution!Risk of electrical shock

When operating the transducer,certain parts of the module may carry hazardous live voltage(e.g.primary conductor).The user shall ensure to take all measures necessary to protect against electrical shock.The transducer is a build-in device containing conducting parts that shall not be accessible after installation.A protective enclosure or additional insulation barrier may be necessary.Installation and maintenance shall be done with the main power supply disconnected except if there are no hazardous live parts in or in close proximity to the system and if the applicable national regulations are fully observed.

Safe and trouble-free operation of this transducer can only be guaranteed if transport,storage and installation are carried out correctly and operation and maintenance are carried out with care.

WARING!

Do not stress the coil by applying any kind of mechanical force(ie.twisting,puncturing,excessive pressure,tight bending,etc.) which will dramatically degrade the device's accuracy.

Order code

Coil:

Coil Model	Coil diameter (mm)	Output ratio and tolerance	Signal cable length
Code:Y-FCT	**Code:**200(Typical rated 500A) **Code:**350(Typical rated 1500A) **Code:**510(Typical rated 3kA) **Code:**800(Typical rated 10kA) **Y-FCT code is length.**	**Code:110** 110mV/kA@50Hz±5% **Code:100** 100mV/kA@50Hz±0.5% **Code:85** 85mV/kA@50Hz±0.5% **Code:50** 50mV/kA@50Hz±0.5%	**Code:-2m** **Code:-5m** **Code:-10m** **Code:-20m**
Code:NRC	**Code:100**(Typical rated 1kA) **Code:150**(Typical rated 3kA) **Code:200**(Typical rated 6kA)		
Code:MRC	**Code:16**(Typical rated 100A) **Code:24**(Typical rated 300A) **Code:36**(Typical rated 600A)	**Code:60** 60mV/kA@50Hz±5% **Code:50** 50mV/kA@50Hz±0.5%	
Code:SRC	**Code:50** **Code:100** **Code:150**	**Code:360** 360mV/kA@50Hz±5% **Code:333** 333mV/kA@50Hz±0.5% **Code:100** 100mV/kA@50Hz±0.5% **Code:85** 85mV/kA@50Hz±0.5% **Code:50** 50mV/kA@50Hz±0.5%	
Other requirement could be OEM			

Final Code=Coil model+Diameter(Y-FCT is coil length)+Output ratio+Signal cable length

For example:

NRC-150-100-2m is NRC connector,diameter 150mm,output 100mV/kA@50Hz 0.5% tolerance,signal cable length is 2meter.

Integrator:

Integrator	Output form	Output value	Rated current	Power supply
Code:D1 (DIN-RAIL integrator)	**Code: .1**(AC voltage output) **Code: .2**(DC voltage output)	**Code: -333**(333mV) **Code: -1**(1V) **Code: -5**(5V)		**Code: -12(12V DC)** **Code: -24(24V DC)**
	Code: .3(4-20mA output)	**N/A**		
Code:S9 (mini integrator)	**Code: .1**(AC voltage output) **Code: .2**(DC voltage output)	**Code: -333**(333mV) **Code: -1**(1V) **Code: -3**(3V)		**Code: -12(6-12V DC)** **Code: -24(24V DC)**
Code:S1 (high accuracy integrator)	**Code: .1**(AC voltage output) **Code: .2**(DC voltage output)	**Code: -333**(333mV) **Code: -5**(5V) **Code: -10**(10V)	**Code: -600A** **Code: -1kA** **Code: -3kA** **Code: -6kA**	**Code: -12(4-12V DC)** **Code: -24(24V DC)**
	Code: .3(4-20mA output)	**N/A**		
Code:ATP-01 (1A output three phase integrator)	**N/A**(0-1A)	**N/A**		**Code: -12(12V DC)** **Code: -24(24V DC)**
Code:A01 (1A output integrator)	**N/A**(0-1A)	**N/A**		**N/A(85-265V AC DC)**
Code:A05 (5A output integrator)	**N/A**(0-5A)	**N/A**		**N/A(85-265V AC DC)**
Code:HF (high frequency integrator)	**N/A**(0-10VAC peak)	**N/A**	**Code: -1kA(1kA/1V)** **Code: -10kA(10kA/1V)**	**N/A(4-12V DC)**
Other requirement could be OEM				

Final Code=Integrator+Output form+Output value+Rated current+Power supply

For example:

D1.1-1-500A-12 is D1 integrator,AC voltage output,500A rated,output 1V,power supply 12V DC

A01-1kA is A01 integrator,rated 1kA,output 1A,power supply 85-265V AC DC