# iTrans108

### **Electrical Multi Function Transducer**



- Very Competitively priced Multi-Function Transducer
- Measures V/I/P/Q/F/PF/Energy Totally 28 parameters
- With upto 4 analog outputs User Configurable (Opt)
- With RS485 digital communications, MODBUS RTU Protocol
- With 2 pulse outputs for energy KWH & KVARH
- Four Quadrant, TRMS measurement, Programmable CT/PT values
- Ideal Cost Effective replacement for all Individual Electrical Transducers.
- Ideal for SCADA, Energy Management System, Electrical automation & Control, Substation automation, Distribution Automation, Industrial automation, switchgear & control panels, MCC, C&R Panels



### **Technical Parameters**

Connection	3 phase 3 wires, 3 phase 4 wires
Rated Voltage Value	AC 100V , 400V(please noted when making order)
Voltage Overload	Continuous: 1,2 times Instantaneous: 2 times/10S
Voltage Consumption	1VA each phase
Voltage Imdepance	≥300KΩ
Voltage Accuracy	RMS measurement , Accuracy : 0.5
Rated current	AC 3A 5A
Current Overload	Continuous: 1.2 times Instantaneous: 10 times/10S
Current Consumption	<0.4VA (each pahse)
Current Imdepance	<20mΩ
Current Accuracy	RMS measurement, Accuracy 0.5
Frequency	45-60Hz , Accuracy: 0.1Hz
Power	Active power/Reactive power/Apparent power, accuracy: 0.5%F.S
Energy	Active power/Reactive power accuracy 1%
Power Supply	AC/DC 100 -240V (85 -265V)
Power Supply Consumption	≤5VA
Output Digit Interface	RS-485 Modbus-RTU Protocol
Pulse Output	2 energy pulse output(optical coupler relay)
Analog Output	4 analog output , 4-20mA DC
Working Environment	Temperature: -10 <sup></sup> 55 ℂ , Humidity: ≪85% RH
Storage Environment	-20 -75%
Isolation&puncture	Input signal and power 1600V AC , Input and output 1600VAC , power and transformed analog output, RS485 connection , Pulse output connection≥DC 2000V
Insulation	Input/output/power supply to Meter cover ${}^{\cdot,\cdot}5M\Omega$
Dimension	160W×80H×100L
Weight	0.6kg

## iTrans108

#### **Electrical Multi Function Transducer**



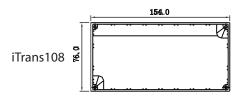
### **Output Function**

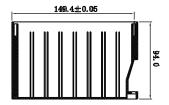
#### 1. Energy pulse

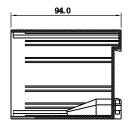
iTrans108 provides the function of 4 quadrant energy calculation, 2 energy pluse output and RS485 interface for display and transmit of energy data. The energy pulse of optical couple relay with open collector enables the long distance transmit of active&reactive energy. Remote PC terminal, PLC, DI On-Off output and collector module are applied to collect the pulse of coulometer to enable the energy cumulation calculation. Besides, this output mode is also the energy accuracy check way(National metrology regulations: Standard meter pulse tolerance comparison method) (1). Electrical characteristic: the output of optical couple relay with open collector, V≤ 48V, Iz≤ 50mA

(2). Pulse constant: 7200imp/kwh. It means the impulse output No. is 7200 when the coulometer counts up to 1KWH. The piont should be emphasized is that the above 1kwh is for the 2nd coil energy. Supposed that PT and CT is connected, the primary coil energy that 7200 pulse refer to is equal to 1kwhX voltage transform PT X current transform CT.

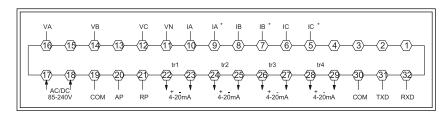
#### Dimension







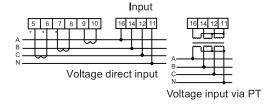
#### Connection

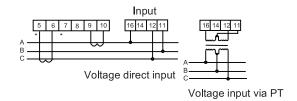


Note: If there is any difference with the connection on the back side of the meter, please base on the connection on the meter.

Model 1: (3pcs CT) 3 phase 4 wire working mode with central line

Model 2: (2pcs CT): 3 phase 3 wire working mode





## ORDER FORM

With 4 Analog outputs – A108 - A

Without Analog Outputs – B
108 - B



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