

## DDSI39 Single-phase PLC Static Energy Meter

### Summary

DDSI39 series PLC static energy meter is a terminal unit of automatic reading system based on special large scale integrated circuit and SMT technology by adopting microelectronic and computer technology as core technology and depending on modern management. simple structure, high reliable performance and security, etc. This meter is adopt power line carrier wave, no need other communication cable, so that to reduce the cost and avoid dangerous when the cable is broken.



### Technical specification

#### 1. Electrical condition

Accuracy class: 1.0 class, 2.0 class;

Conformed standards: voltage circuit  $\leq 1.5W/5VA$ , current circuit  $\leq 2.5VA$ ;

Start-up current: 0.4%(1.0 class), 0.5%(2.0 class);

Shunt running: anti-shunt running design;

Carrier wave signal level:  $< 0.6P-P$ ;

Carrier wave communication distance: 3km;

The difference value between memory data and the data of counter:  $< 0.0kWh$ ;

#### 2. Ambient condition

Normal working temperature:  $-25^{\circ}C \sim +55^{\circ}C$ ;

Limit working temperature:  $-40^{\circ}C \sim +70^{\circ}C$ ;

Relative humidity: annual average  $< 80\%$ ;

#### 3. Accord standard: IEC62053; DL/T689-1999; GB/T 17215-2002;

Relay accuracy: 3 class.

#### 4. Memory life: 30 years.

### Model

Model	Rated power frequency (Hz)	Rated current (A)	Meter constant(imp/kwh)
DDSI39(220)	50/60	1.5(6) 2.5(10) 5(20) 10(40) 15(60)	12800, 6400, 3200, 1600

### Product function

#### 1. Metering function

AD7755 measure positive and negative active power on same direction to avoid current in reverse;

Metering line have high quality, wide working range, the error less than 0.3% under 5000:1;

The data will keep more than 10 years and it will not lost after current out.

#### 2. Carrier wave communication function

It used for setting the parameter and reading; It can operate the relay of meter;

Communication speed rate: 500bps; communication distance:500m (between tie points);

Can expand communication distance;

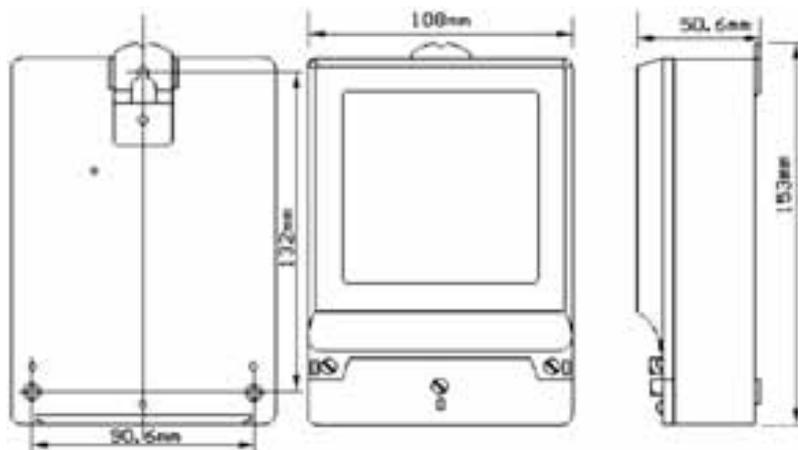
Communication rule: the communication rule of single tariff carrier wave channel;

#### 3. Impulse output function

Used for verify meter and collection power;

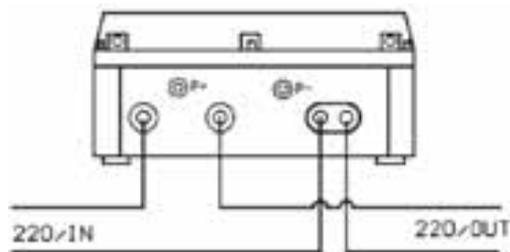
Out of power isolating output port.

## Outline dimension and Wiring diagram



Outline dimension

Diag .1 Outline dimension and installation



Diag .2 Wiring diagram