

Smart Card Prepayment Energy Meter

User Manual

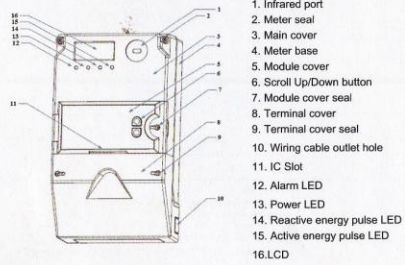


Warning

Please do not open meter because there are no user serviceable parts inside the meter and under no circumstances should it be opened. Tampering of meter is forbidden and may cause load disconnection and may be punishable by law. Meter is designed that no need user maintenance. Should the meter need cleaning we recommend gently wiping the cover with a cloth lightly dampened with methanol.

• Meter Guidance

DTZ1513 three phase prepayment energy meter comply with unified prepayment system. The prepayment meter and system helps you better manage electricity usage, measures and controls electricity accurately, consequently reduces your cost of electricity. Meter has been manufactured to the highest world-class specifications and installed according to strict standards. It will provide you with years of trouble-free service. We suggest that you read this leaflet before using the meter to ensure its correction application.



1. Infrared port
2. Meter seal
3. Main cover
4. Meter base
5. Module cover
6. Scroll Up/Down button
7. Module cover seal
8. Terminal cover
9. Terminal cover seal
10. Wiring cable outlet hole
11. IC Slot
12. Alarm LED
13. Power LED
14. Reactive energy pulse LED
15. Active energy pulse LED
16. LCD

6. Scroll Up/Down button
User can use the up/down button to check the default display item
11. IC Slot
After buying credit, insert the IC card into the slot to charge the meter.
12. Alarm indicator LED
When balance amount is lower than threshold value for pre-warning, meter will alarm and yellow LED indicator will flash to notify users to recharge the meter.
13. Power indicator LED
When meter is connected to power supply, LED will be on.
14. Reactive energy pulse LED
When the consumer is consuming reactive energy, the LED will flash fast or slow.
15. Active energy pulse LED
When the consumer is consuming active energy, the LED will flash fast or slow.
16. LCD display
User can see meter status and default display item

• How it works?



After installation of prepaid meter, you need to regularly buy electricity from utility. The workflow is simple and consists of following steps:



1. When you need to purchase power, please go to the vending station; give the IC card to the utility staff, the vending station will read your personal account information.



2. Inform the power/amount you intend to purchase to utility staff. After making payment, IC card will be written with 20 digits TOKEN which including the purchase information and IC card will be given back to you.



3. Insert the IC card correctly through the meter IC slot, waiting for LCD showing **Card_OK** symbol, that means the meter is charged with credit and user can use power.



4. Take out the IC card and keep it security.



Warning

1. Only IC card is paired with meter, operation is ok, otherwise LCD will show **CardErr0**. If IC card insert reversed, it will also show **CardErr0**.
2. If showing **Card_OK**, means token is input and charge successfully, the token in IC card will be delete.
3. If any token in IC card is not correct, it will show **CardErr3**, you need to contact utility staff
4. If token in IC card has been used, when you insert IC card again(except in emergency credit status), LCD will show **CardErr4**.

• The LCD display

No.	Example	Instruction
1		Code display Support OBIS code
2		Four-quadrants indicator

No.	Example	Instruction
3		Remaining Credit Indicator
4		Relay status indicator ① Relay ON ② Relay OFF
5		Smiley Face: Meter in Good Condition Sad Face: Meter in Bad Condition
6		Current Tariff (multi-tariff mode)
7		Currency symbol, amount mode
8		Module cover instruction ① lighting: Module cover was opened but now closed ② flashing: Module cover is opened now
9		Terminal cover instruction ① lighting: Terminal cover was opened but now closed ② flashing: Terminal cover is opened now
10		Unit kWh: active energy unit kW: active power unit kVAh: reactive energy unit kVar: reactive energy unit V: voltage unit A: current unit
11		Data ① Metering figure, Token code ② date: YY-MM-DD ③ time: hh-mm-ss
12		Battery lighting: low battery, replace battery disappear: normal
13		Terminal cover alarm ① lighting: Terminal cover was opened but now closed ② flashing: Terminal cover is opened now

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No.	Example	Instruction
14		Communication Status ① flashing: normal ② lighting: abnormal
15		Phase Voltage Indicator A: one or two disappear, lose phase voltage B: flashing means alarm in related phase

Example



No.	Name	Remarks
1	OBIS code area	Remaining credit OBIS: C.50.1
2	Metering status indicator	Active and Reactive energy direction
3	Remaining credit ladder diagram	Indicating remaining credit, now is enough
4	Relay status	Relay close
5	Current Tariff	T2
6	Unit	Active energy displaying
7	Phase voltage indicator	Three phase normal
8	Main data area	Remaining credit: 12107.6

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Special display when TOKEN is input

OVEr_VoL	Grid input over voltage, relay will trip, and display actual voltage
Lo_VoL	Grid input low voltage, relay will trip, and display actual voltage
EG_CrEdi	Using emergency credit, need to buy credit to recharge meter
tamper	Meter is in tamper status
Lo_CrEdi	Low credit alarm status, need to buy credit to recharge meter
no_CrEdi	Meter has no credit, relay trip, need to buy credit to recharge meter
Err_01	Token Sequence Number Error
Err_02	Token type Error
Err_04	Token Data Error/Card Data used
USED	Token Used
Full	Over Credit, could not charge any more
ACCEPT	Token Accepted
Card_Ok	Card data Accepted
CardErr0	Card Address mismatch or read card failure
CardErr1	Card Password verify Error
CardErr2	Card Read write Error
CardErr3	Card Token Error
CardErr4	Card Token Used
rEAding	Card reading

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Important inquiry code

User can retrieve important parameters on LCD or by pressing the scroll up/down button.

Code	Code content
C.50.1	Remaining Credit
15.9.0	Current month active energy consumption
15.9.0.1	Last month import active energy consumption
31.7.0	Phase L1 current
51.7.0	Phase L2 current
71.7.0	Phase L3 current
0.9.1	current time
1.6.0	Current month maximum demand date and time
1.7.0	Combined phase active power
41.7.0	Phase L2 active power
13.7.0	Power factor
C.51.12	Low credit alarm limit
15.8.0	Total active energy consumption
C.70.1	Current active energy price
32.7.0	Phase L1 voltage
52.7.0	Phase L2 voltage
72.7.0	Phase L3 voltage
C.50.34	Load threshold

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Code	Code content
0.9.2	Current date
1.6.0.1	Last month max demand date and time
21.7.0	Phase L1 active power
61.7.0	Phase L3 active power
14.7.0	Frequency
C.60.10	Payment mode