

**Energy Meter Functions:**

1. kWh
2. Bidirectional Energy Monitor
3. Voltage
4. Current
5. Power
6. Power Factor
7. Frequency
8. kWh Data Clearing

**Technical Data**

Rated Voltage	L+N=AC80-240V
Rated Current	80A/120A/200A/300A/500A/750A/1000A (Depend on the current transformers CT)
Rated Frequency	50/60Hz
Measurement Accuracy	±1%/Class 1 80-300A starts from 0.03A, 500-1000A starts from 0.1A
Device Data Refresh Speed	1 Time/S
App Data Refresh Speed	If fluctuations in kWh (±5V), voltage (±0.8A), or temperature (±5°C) occur → Upload to App immediately; otherwise, upload every 5 minutes.
Power Consumption	<1.5W
Installation	35MM Din Rail
Working Temperature	-10°C~+55°C
Storage Temperature	-40°C~+70°C
Working Humidity	5%~95%RH
Dimensions	90*72.5*60MM(L*W*H)
Display Type	LCD
Max kWh Record	999999kWh
Display Working Time	Always On
Load Capacity	0.05Ib~Imax
Standard	IEC62053-21&GB/T17215.321-2008
Certification	CE
Warranty	1 Year

**Package Includes:**

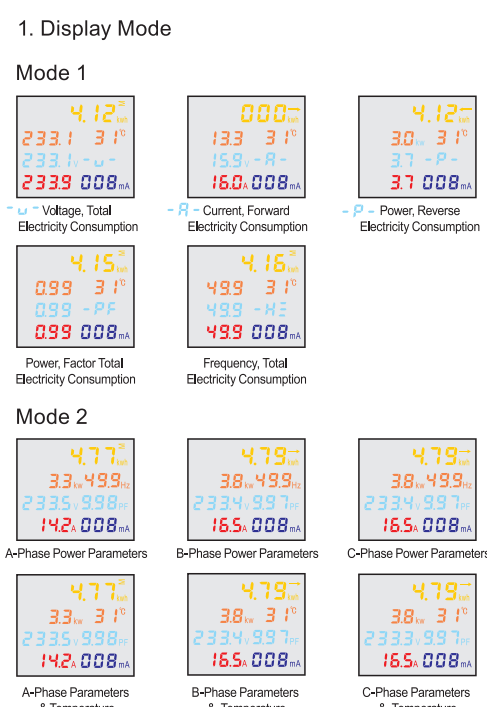
1. Host ×1
2. 3000:1 Current Transformers CT×3 (The current depends on user's choice)
3. Users' Manual×1

**Protection Functions:**

1. Over Voltage Protection
2. Under Voltage Protection
3. Over Current Protection
4. Under Current Protection
5. Delay Protection
6. Timer Switch
7. Voltage Imbalance Protection(Can only be set on App)
8. Voltage Imbalance Protection(Can only be set on App)
9. Shortage Phase Protection(Can only be set on App)
10. Phase Sequence Protection(Can only be set on App)
11. High Temperature Protection(Can only be set on App)
12. Current Leakage Protection(An external leakage current transformer is required for this function, it is not included in the package. Users are requested to purchase it on their own if usage is required!)

Each parameter can be set with action threshold and On/Off.

**⚠️ A circuit breaker and a shunt trip device is required for protection functions, which are not included in the package. If required, users should purchase them separately!**



**2. Fault Records:**

Record over & under voltage, over & under current, current leakage, voltage imbalance, current imbalance, and phase sequence protection. Note: Tuya app records.

**3. WiFi Indicator Light Status:**

1. Fast flashing indicates searching for WiFi signal
2. Slow flashing indicates WiFi offline status
3. Long light indicates that WiFi is connected

**4. Fault Settings:**

Long press **OK** key to enter the settings states and show the settings

Change the settings by press **←** **→** keys

Short press **OK** key to confirm the settings on this page and jump to the next settings page

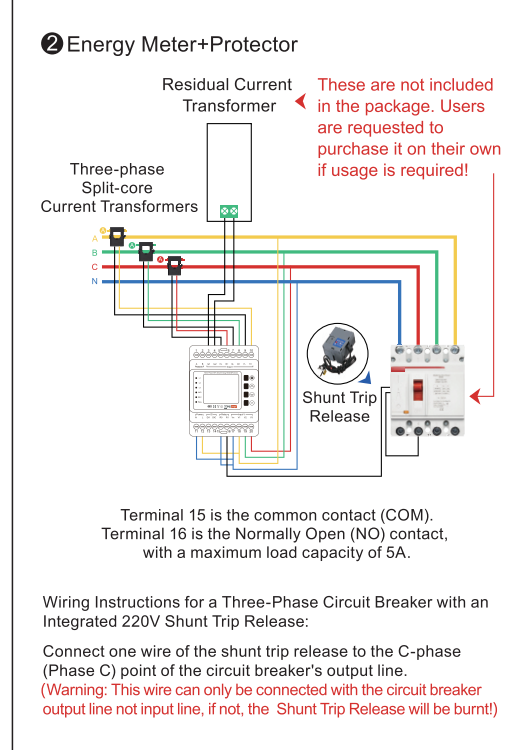
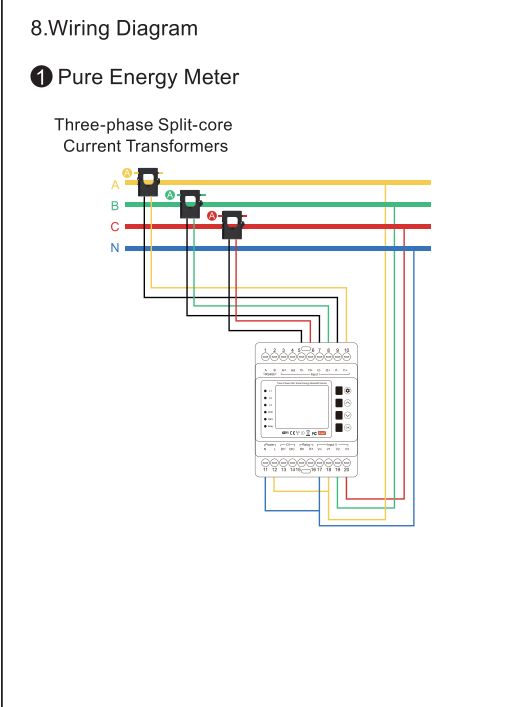
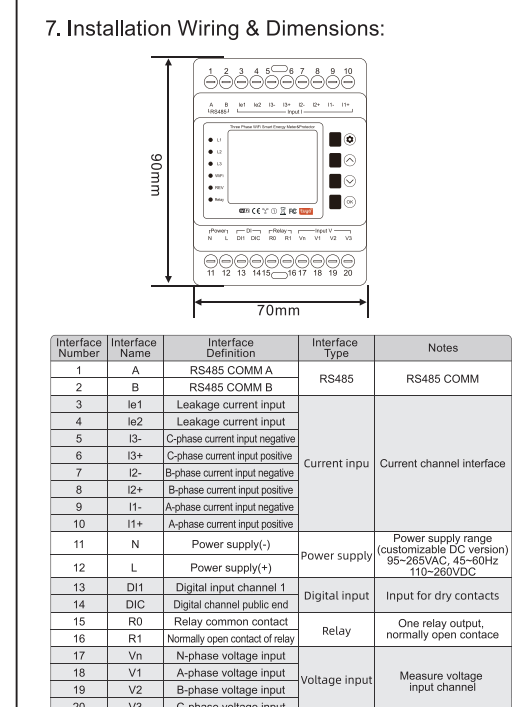
Long press **OK** key to exit the settings states and save the settings

**5. Installation and Usage Conditions:**

1. Working Temperature: -30°C~70°C
2. Working Humidity: ≤85%
3. Working Altitude: Not Exceeding 2000m
4. Pollution Level: Level 3
5. Modular design appearance and din rail installation
6. Wiring Capacity: Insulated copper wire user 35mm²

**6. Notes:**

1. This product has no isolation function. Please turn off the power before repairing.
2. The zero line (Neutral N line) of this product is directly connected without any disconnection function.
3. The device must be wired according to the markings and must be installed correctly.
4. Although this device has protection function, but it cannot replace normal circuit breaker, so please install circuit breaker before this device as always.
5. Please tighten the clamp screws hard to avoid the device being damaged caught by poor contact.



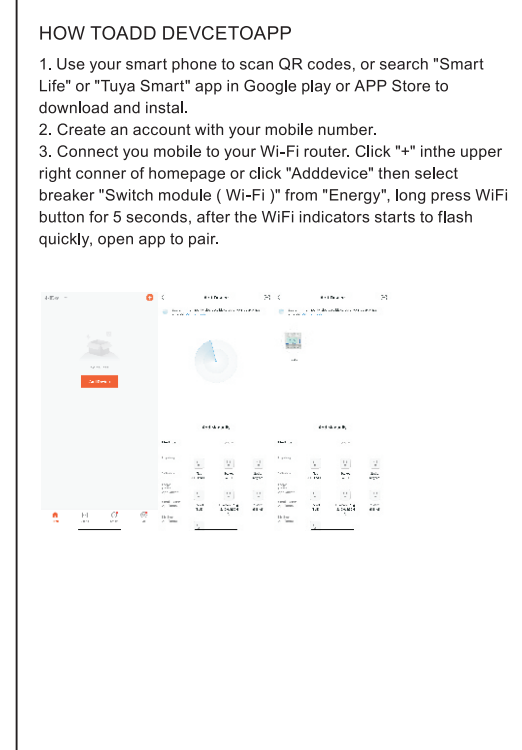
**9. Current Transformers CT Datasheet**

Model	80A	120A	200A	300A	500A	750A	1000A
Φ	10mm	16mm	24mm	24mm	36mm	50mm	50mm
A	32.5mm	36.2mm	53.5mm	53.5mm	68.5mm	86.5mm	86.5mm
B	24mm	30mm	44.5mm	44.5mm	58mm	75mm	75mm
C	41mm	50.5mm	65.5mm	65.5mm	87mm	114.5mm	114.5mm
E	32mm	39.5mm	41.5mm	41.5mm	50mm	58mm	58mm
G	26mm	32.5mm	34mm	34mm	42mm	48.5mm	48.5mm

Current Transformer CT Transformation Ratio 3000:1

Function	Set Parameter Range	Factory Default Settings	Function Description
Over Voltage Limit	120V-300V	275V	If the over voltage limit is set at 300V, when the voltage is over 300V, the device will automatically switch off.
Under Voltage Limit	80-210V	175V	If the under voltage limit is set at 80V, when the voltage is under 80V, the device will automatically switch off.
Under & Over Voltage Protection Delay	1-9999Second(S)	3s	If the voltage is over or under the set value, the device will automatically switch off after the set delay time.
Over & Under Voltage Protection Recovery Time	1-9999Second(S)	20s	If the voltage is over or under the set value, the device will automatically switch off and when the voltage returns to normal value it will recover after the set delay time.
Over Current Limit	1.0-100.0A	80.0A	If the over current limit is set at 80A, the device will automatically switch off when the current is over 80A.
Over & Under Current Protection Delay	0000-9999Second(S)	5s	If the current is over or under the set value, the device will automatically switch off after the set delay time.

Function	Set Parameter Range	Factory Default Settings	Function Description
Over & Under Current Protection Recovery Time	0000-9999Second(S)	20s	If the current is over or under the set value, the device will automatically switch off and when the current returns to normal value it will recover after the set delay time.
Under Current Limit	1.0-100.0A	10.0A	If the under current limit is set at 60A, the device will automatically switch off when the current is under 60A.
Current Leakage Limit	10-100mA	30mA	If the current leakage limit is set at 30mA, the device will automatically switch off when the current leakage is over 30mA.
Display Mode	Display Mode 1 Display Mode 2	Display Mode 1	Default Display Mode 1, refer to page 3 (Display Mode)
Energy Consumption Zero Clearing		Default OFF	OFF/On
Factory Settings Reset		Default OFF	OFF/On



**PROOUCT PARAMETERS**

Rated Supply Voltage: AC380V	Operation Voltage Range: AC80V-400V (Single Phase)
Rated Frequency: 50/60Hz	Rated Current: 1-100A
Power Display Range: 0-99999.9kWh	Operating Temperature: -30°C to 70°C
Protection Trip Action Time: <0.5s	

Setting Range:  
 Over Voltage: (-U) 120-300V Under Voltage: (+U) 80-210V  
 Over Current & Leakage Protection: Reset / Start Delay: 0s-9999s  
 Current Leakage: 10-99mA/OFF  
 Protect Times: 1-30s/timeout



**电能表功能:**

1. 电能表
2. 双向用电量监测
3. 电压
4. 电流
5. 功率
6. 功率因素
7. 频率
8. 用电量清零

**技术参数**

额定电压	L+N=AC80-240V
额定电流	80A/120A/200A/300A/500A/750A/1000A(取决于互感器)
额定频率	50/60Hz
测量精度	±1%/1级 80-300A/0.3A起测, 500-1000A/0.1A起测
硬件数据刷新速度	1次/秒
App数据刷新速度	若kWh (±5V), 电压 (±5V), 电流 (±0.8A) 或温度 (±5°C) 发生波动 → 立即上传至APP; 否则每5分钟上传一次。
功耗	<1.5W
安装	35MM导轨
工作温度	-10°C~+55°C
存储温度	-40°C~+70°C
工作湿度	5%~95%RH
尺寸	90*72.5*60MM(L*W*H)(长*宽*高)
显示屏类型	LCD
最大用电量记录	999999kWh
显示工作时间	常亮
负载	0.05Ib~Imax
标准	IEC62053-21&GB/T17215.321-2008
认证	CE
保修	1年

**该产品包含:**

1. 主机×1
2. 3000:1互感器CT×3 (电流根据用户选项)
3. 说明书×1

**保护功能:**

1. 过压保护
2. 欠压保护
3. 过流保护
4. 欠流保护
5. 延时保护
6. 时控开关
7. 电压不平衡保护(仅在APP端可设置)
8. 电流不平衡保护(仅在APP端可设置)
9. 缺相保护(仅在APP端可设置)
10. 相序保护(仅在APP端可设置)
11. 高温保护(仅在APP端可设置)
12. 漏电保护(该功能需搭配外置漏电互感器使用, 本产品不包含该互感器, 如需使用请用户自行购买!)

每个参数可设置动作阈值和开/关。

**⚠️ 保护功能需搭配断路器与分励脱扣器使用, 本产品不包含断路器与分励脱扣器, 如需使用请用户自行购买!**



**2.故障记录:**

记录过压、欠压、过载、失流、漏电、电压不平衡、电流不平衡、相序保护。

注: 涂鸦APP记录

**3.WIFI指示灯状态:**

1. 快闪表示等待发现WiFi信号。
2. 慢闪表示WiFi离线状态。
3. 长亮表示WiFi已连接。

**4.功能设置:**

长按 **OK** 设置键进入设置状态显示设置页面, 闪烁显示设置的数据位

通过 **←** **→** 上下按键设置该位内容

短按 **OK** 确认该设置, 跳转下一个设置页面

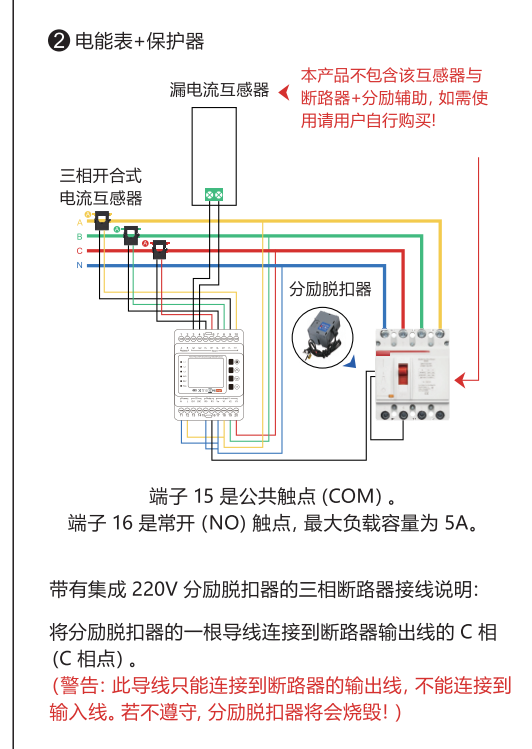
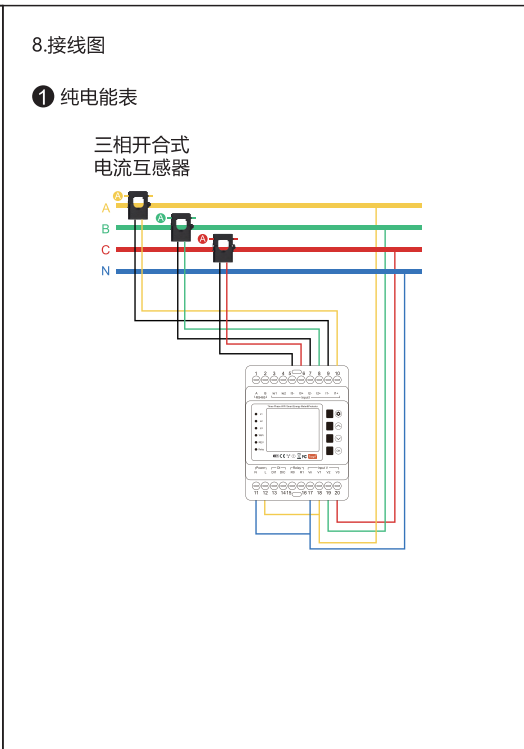
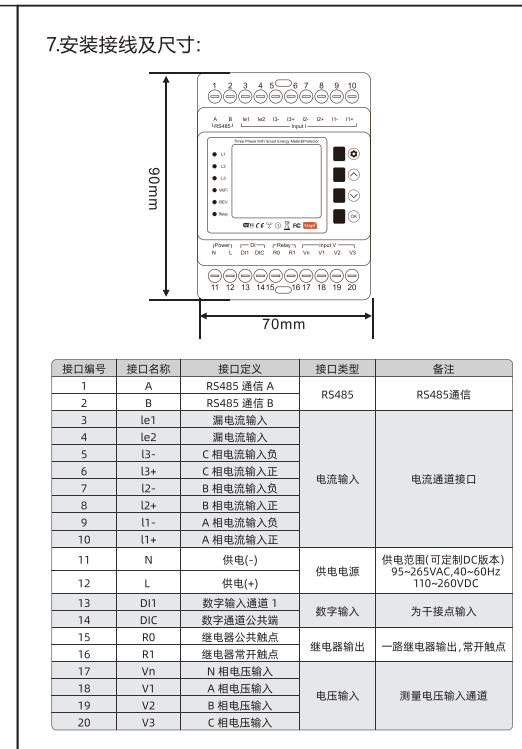
长按 **OK** 退出设置状态, 保存设置

**5.安装及使用条件:**

1. 温度: -30°C~70°C
2. 湿度: ≤85%
3. 海拔高度: 不超过2000m
4. 污染等级: 3级
5. 外形模块化设计, 导轨式安装。
6. 接线能力: 35mm²及以下绝缘铜导线。

**6.注意事项**

1. 本产品无隔离功能, 维修线路时请断开前级断路器开关
2. 本产品零线(N线)直接接通, 无断开功能。
3. 保护器必须按标接线, 不得接错。
4. 本产品虽有限流保护功能但不能代替断路器, 请在线路前端安装如DZ47、C65等断路器作短路保护。
5. 在使用前请拧紧卡线螺钉, 防止接触不良而损坏产品。



将分励脱扣器的另一根导线连接到常开 (NO) 端子 16, 将电表的中性线 (N) 连接到公共 (COM) 端子 15。

**9.互感器CT参数**

Model	80A	120A	200A	300A	500A	750A	1000A
Φ	10mm	16mm	24mm	24mm	36mm	50mm	50mm
A	32.5mm	36.2mm	53.5mm	53.5mm	68.5mm	86.5mm	86.5mm
B	24mm	30mm	44.5mm	44.5mm	58mm	75mm	75mm
C	41mm	50.5mm	65.5mm	65.5mm	87mm	114.5mm	114.5mm
E	32mm	39.5mm	41.5mm	41.5mm	50mm	58mm	58mm
G	26mm	32.5mm	34mm	34mm	42mm	48.5mm	48.5mm

互感器CT变比3000:1

功能	设置参数范围	出厂默认设置	功能描述
过电压限值	120V-300V	275V	如果过电压限值设置为300V, 当电压超过300V时, 设备将自动断开。
欠电压限值	80-210V	175V	如果设置欠电压限值为80V, 当电压低于80V时, 设备将自动断开。
欠压和过压电压保护延迟	1-9999秒(S)	3秒	如果电压超过或低于设定值, 设备将在设定的延迟时间后自动断开。
过压和欠压电压保护恢复时间	1-9999秒(S)	20秒	如果电压超过或低于设定值时, 设备将自动关闭当电压恢复正常值时, 则在设置的延迟时间后恢复。
过电流限值	1.0-100.0A	80.0A	如果设置过电流限制为80A, 当电流超过80A时, 设备将自动断开。
大与小电流保护延迟	0000-9999秒(S)	5秒	如果电流超过或低于设定值, 设备将自动执行在设定的延迟时间后关闭。

功能	设置参数范围	出厂默认设置	功能描述
大与小电流保护恢复时间	0000-9999秒(S)	20秒	如果电流超过或低于设定值, 设备会自动关闭当电流恢复到正常值后, 在设定的延迟时间后恢复。
电流限值	1.0-100.0A	10.0A	如果将欠电流限制设置为60A, 当电流低于60A时, 设备将自动关闭。
电流泄漏限值	10-100mA	30mA	如果将电流限制设置为30mA, 则当漏电流超过30mA时, 设备将自动关闭, 当漏电流超过30mA时, 设备将自动关闭。
显示模式	显示模式 1 显示模式 2	显示模式 1	默认显示模式1, 参见第3页(显示模式)
能源消耗零清除		默认关闭	关/开
出厂设置重置		默认关闭	关/开



**项目参数**

额定电压: AC380V	工作电压范围: AC80V-400V (单相)
额定频率: 50/60Hz	额定电流: 1-100A
功率显示范围: 0-99999.9kWh	工作温度: -30°C至70°C
保护响应时间: <0.5秒	

设置范围:  
 过压 (+U): 120-300V 欠压 (-U): 80-210V  
 漏流和漏电保护: 保护时间: 1-30s/关 漏电: 10-99mA/OFF  
 复位/启动延迟: 0s-9999s

