

OWON SMART ENERGY METER

Measure everything. Control it your way.

UniClip & TrioClip open-type CT meters for single-phase and three-phase systems — monitor what you consume and produce, from the Tuya App to direct Open API integration.

TU YA SERIES

APP-POWERED · TUYA CLOUD



UniClip Lite
PC4711-W-TY · Single-Phase



UniClip Pro
PC4711-W-E-TY/R · Single-Phase · Relay



TrioClip Lite
PC4713-W-TY · Three-Phase



TrioClip Pro
PC4713-W-E-TY/R · Three-Phase · Relay

OPEN API SERIES

HTTP · MQTT · MODBUS TCP · RS485



TrioClip Open
PC4713-W · Three-Phase



TrioClip Open
PC4713-W-485 · Three-Phase · RS485



UniClip Open
PC4711-W-485 · Single-Phase · RS485

⚡ From the Tuya App to direct Open API — one meter family, every integration path.

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FAMILY OVERVIEW · TUYA SERIES

Model Comparison

Specification	 UniClip Lite PC4711-W-TY	 UniClip Pro PC4711-W-E-TY/R	 TrioClip Lite PC4713-W-TY	 TrioClip Pro PC4713-W-E-TY/R
Supported Systems	Single-Phase	Single-Phase	Single / Split / Three-Phase 1P2W/1P3W/ 3P4W	Single / Split / Three-Phase 1P2W/1P3W/ 3P4W (3P3W optional)
Nominal Voltage	230 V AC · 50/60 Hz 90–277 V	230 V AC · 50/60 Hz 90–277 V	3×230/400 V AC · 50/60 Hz 90–277 V	3×230/400 V AC · 50/60 Hz 90–277 V
CT Quantity	Max. 2 open-type CTs 80 / 120 / 200 / 300 A	Max. 2 open-type CTs 80 / 120 / 200 / 300 A	Max. 3 open-type CTs 80 / 120 / 200 / 300 / 500 / 750 A	Max. 3 open-type CTs 80 / 120 / 200 / 300 / 500 / 750 A
CT Inner Diameter	Ø10 / 16 / 20 / 24 mm	Ø10 / 16 / 20 / 24 mm	Ø10 / 16 / 20 / 24 / 36 / 51 mm	Ø10 / 16 / 20 / 24 / 36 / 51 mm
Connectivity	 Wi-Fi + BLE	 Wi-Fi + Ethernet + BLE	 Wi-Fi + BLE	 Wi-Fi + Ethernet + BLE
Relay	—	Dry contact · 3 A / 5 A Overload protection	—	Dry contact · 3 A / 5 A Overload protection
Bi-Directional	✓ Usage / Solar	✓ Usage / Solar	✓ Usage / Solar	✓ Usage / Solar
Offline Storage	✓ Auto re-report	✓ Auto re-report	✓ Auto re-report	✓ Auto re-report
Tuya App Data	Real-time / historical Day · Week · Month · Year	Real-time / historical Day · Week · Month · Year	Real-time / historical Day · Week · Month · Year	Real-time / historical Day · Week · Month · Year
Remote Management	Data erase · Reboot · CT setting	Data erase · Reboot · CT setting	+ Phase sequence alarm	+ Phase sequence alarm
Reporting Cycle	15 s	15 s · Relay status instant	15 s	15 s · Relay status instant
Accuracy	Voltage ±1% · Current ±1% (rated) / ±2% (low)	Voltage ±1% · Current ±1% (rated) / ±2% (low)	Voltage ±1% · Current ±1% (rated) / ±2% (low)	Voltage ±1% · Current ±1% (rated) / ±2% (low)
Mount / Dimension	35 mm DIN rail 19 × 69 × 90 mm	35 mm DIN rail 19 × 69 × 90 mm	35 mm DIN rail 19 × 69 × 90 mm	35 mm DIN rail 19 × 69 × 90 mm
Certification				

Measurement: real-time voltage, current, power factor, frequency, active / reactive / apparent power. Operating environment: -20 °C ~ +55 °C, humidity ≤ 90% (non-condensing). All models support Tuya automation scenes & HA platform integration. Full details per the official datasheets.



Plug & Play

BLE pairing, live in minutes



Bi-Directional

Usage & solar, one meter



Offline Storage

No data loss on outage



Automation & HA

Scenes + Home Assistant

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FAMILY OVERVIEW · OPEN API SERIES

Open API Model Comparison

CERTIFICATE: 

Specification	 TrioClip Open PC4713-W · Three-Phase	 TrioClip Open PC4713-W-485	 UniClip Open PC4711-W-485 · Single-Phase · RS485
Supported Systems	Single / Split / Three-Phase (1P2W/1P3W/ 3P4W)	Single / Split / Three-Phase (1P2W/1P3W/ 3P4W)	Single-Phase
Nominal Voltage	3×230/400 V AC · 50/60 Hz 90–277 V	3×230/400 V AC · 50/60 Hz 90–277 V	230 V AC · 50/60 Hz 90–277 V
CT Quantity	Max. 3 open-type CTs 80 / 120 / 200 / 300 / 500 / 750 A	Max. 3 open-type CTs 80 / 120 / 200 / 300 / 500 / 750 A	Max. 2 open-type CTs 80 / 120 / 200 / 300A
CT Inner Diameter	Ø10 / 16 / 20 / 24 / 36 / 51 mm	Ø10 / 16 / 20 / 24 / 36 / 51 mm	Ø10 / 16 / 20 / 24 / 36 / 51 mm
Connectivity	Wi-Fi 802.11 b/g/n HTTP · MQTT · Modbus TCP	Wi-Fi + RS485 HTTP / MQTT / Modbus TCP · Modbus RTU	Wi-Fi + RS485 HTTP / MQTT / Modbus TCP · Modbus RTU
Data Refresh	50 ms	50 ms	50 ms
Response Time (Modbus RTU)	—	Max 50 ms	Max 50 ms
Report Time	Set in integration	Set in integration	Set in integration
Four-Quadrant · RMS / PQS	✓ Yes	✓ Yes	✓ Yes
Offline Storage	✓ Minute-level · auto re-report	✓ Minute-level · auto re-report	✓ Minute-level · auto re-report
OTA · Web Config · HA	✓ No App required	✓ No App required	✓ No App required
Accuracy	Voltage ±1% · Current ±1% (rated) / ±2% (low)	Voltage ±1% · Current ±1% (rated) / ±2% (low)	Voltage ±1% · Current ±1% (rated) / ±2% (low)
Mount / Dimension	35 mm DIN rail 19 × 69 × 90 mm	35 mm DIN rail 19 × 69 × 90 mm	35 mm DIN rail 19 × 69 × 90 mm

Open API meters report real-time data directly to your own cloud or local server — no third-party public cloud required. Wi-Fi carries HTTP / MQTT / Modbus TCP; RS485 models add Modbus RTU (max 50 ms response). All models support four-quadrant measurement, RMS / PQS modes, OTA and browser-based configuration. Full details per the official datasheets.

Direct-to-Cloud



Report to your own cloud or server

No App Required



Browser config · OTA updates



Four-Quadrant

Usage & solar, RMS / PQS



RS485 Option

Modbus RTU · max 50 ms

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PC4711-W-TY · SINGLE-PHASE

UNICLIP LITE



ENTRY-LEVEL SINGLE-PHASE ENERGY MONITOR

Monitor your single-phase home energy in the Tuya App

Clip the two open-type CTs around your supply cables — measure usage and solar production in one compact meter, and watch it live from your phone.

**Wi-Fi 2.4 GHz · Plug & Play**

BLE-assisted pairing, then full control and data from the Tuya App.

**2 Open-Type CTs · No Rewiring**

80 / 120 / 200 / 300 A options (Ø10–24 mm) , non-intrusive installation, interchangeable CTs

**Bi-Directional Metering**

Energy usage & solar production measured in one meter.

**Offline Storage**

Data stored locally, automatically re-reported after reconnection.

**Real-Time Measurement**

Voltage, current, power factor, frequency, active / reactive / apparent power.

**Remote Management**

Data erase, remote reboot and CT setting stright from the App.

SPECIFICATIONS

System	Single-Phase
Nominal Voltage	230 V AC · 50/60 Hz
Voltage Range	90–277 V
CTs	Max 2 · 80–300 A
CT Inner Ø	Ø10 / 16 / 20 / 24 mm

CONNECTIVITY & FEATURES

Connectivity	Wi-Fi + BLE (pairing)
Reporting Cycle	15 s
Accuracy	V ±1% · I ±1% / ±2%
Operating Env.	–20 °C ~ +55 °C · ≤ 90% RH
Mount & Size	35 mm DIN · 19 × 69 × 90 mm
Certification	CE

**Works with the Tuya App & Home Assistant**

Remote relay control · Real-time & historical data · Automation scenes

PLUG & PLAY

DAY · WEEK · MONTH · YEAR

EXPORT

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PC4711-W-E-TY/R · SINGLE-PHASE · RELAY

UNICLIP PRO



SINGLE-PHASE MONITOR WITH RELAY

Single-phase monitoring with relay control & dual-network backup

Monitor usage and solar production, toggle your load on/off remotely via the built-in relay, and stay connected with Wi-Fi plus Ethernet fallback.



Built-in Dry-Contact Relay+Relay Status Reported Instantly

3 A rated / 5 A max with overload protection — remote load on/off from APP.



Wi-Fi + Ethernet Backup

Ethernet 10/100 Mbps for poor wireless environments — more stable connectivity.



2 Open-Type CTs · No Rewiring

80 / 120 / 200 / 300 A options (Ø10–24 mm) , non-intrusive installation, interchangeable CTs



Bi-Directional Metering on Real-Time

Voltage, current, power factor, frequency, active / reactive / apparent power.



Offline Storage

Data stored locally, automatically re-reported after reconnection.



Remote Management

Data erase, remote reboot and CT setting stright from the App.

SPECIFICATIONS

System	Single-Phase
Nominal Voltage	230 V AC · 50/60 Hz
Voltage Range	90–277 V
CTs	Max 2 · 80–300 A
CT Inner Ø	Ø10 / 16 / 20 / 24 mm

CONNECTIVITY & FEATURES

Connectivity	Wi-Fi + Ethernet + BLE
Relay	Dry contact · 3 A / 5 A
Reporting Cycle	15 s · Relay status instant
Accuracy	V ±1% · I ±1% / ±2%
Mount & Size	35 mm DIN · 19 × 69 × 90 mm
Certification	CE



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PLUG & PLAY

RELAY ON/OFF

AUTOMATION SCENES

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PC4713-W-TY · THREE-PHASE

TRIOCLIP LITE



WHOLE-HOME THREE-PHASE ENERGY MONITOR

Whole-home three-phase monitoring, up to 750 A

Three-phase four-wire, split-phase and single-phase compatible — clip three CTs around your mains and track the whole property from the Tuya App.



Three-Phase · Whole Home

Three-Phase Four-Wire, split-phase & single-phase compatible.



3 Open-Type CTs · Up to 750 A

Six CT options (80–750 A, Ø10–51 mm), non-intrusive installation, interchangeable CTs



Phase Sequence Alarm

Instant alarm if the phases are wired incorrectly.



Bi-Directional Metering on Real-Time

Voltage, current, power factor, frequency, active / reactive / apparent power.



Offline Storage

Data stored locally, automatically re-reported after reconnection.



Remote Management+Phase Sequence Alarm

Data erase, remote reboot, CT setting and instant alarm when wired incorrectly from the App.

SPECIFICATIONS

System	1P / Split / 3P 4W 3P3W & Delta not supported
Nominal Voltage	3×230/400 V AC · 50/60 Hz
Voltage Range	90–277 V
CTs	Max 3 · 80–750 A
CT Inner Ø	Ø10 – 51 mm (6 options)

CONNECTIVITY & FEATURES

Connectivity	Wi-Fi + BLE (pairing)
Reporting Cycle	15 s
Accuracy	V ±1% · I ±1% / ±2%
Operating Env.	–20 °C ~ +55 °C · ≤ 90% RH
Mount & Size	35 mm DIN · 19 × 69 × 90 mm
Certification	CE



Works with the Tuya App & Home Assistant

Remote relay control · Real-time & historical data · Automation scenes

[PLUG & PLAY](#)[DAY · WEEK · MONTH · YEAR](#)[EXPORT](#)

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PC4713-W-E-TY/R · THREE-PHASE · RELAY

TRIOCLIP PRO



FLAGSHIP THREE-PHASE MONITOR

The full three-phase suite — relay, dual network & phase alarm

Three-phase four-wire, split-phase and single-phase compatible — relay control, Ethernet backup and phase-sequence alarm in one flagship meter.

- Built-in Dry-Contact Relay+Relay Status Reported Instantly**
3 A rated / 5 A max with overload protection — remote load on/off from APP.
- Wi-Fi + Ethernet Backup**
Ethernet 10/100 Mbps fallback for weak wireless environments.
- Remote Management+Phase Sequence Alarm**
Data erase, remote reboot, CT setting and instant alarm when wired incorrectly from the App
- 3 Open-Type CTs · Up to 750 A**
Six CT options (80–750 A, Ø10–51 mm), non-intrusive installation, interchangeable CTs
- Bi-Directional Metering on Real-Time**
Voltage, current, power factor, frequency, active / reactive / apparent power.
- Offline Storage**
Data stored locally, automatically re-reported after reconnection.

SPECIFICATIONS

System	1P / Split / 3P 4W 3P3W & Delta not supported
Nominal Voltage	3×230/400 V AC · 50/60 Hz
Voltage Range	90–277 V
CTs	Max 3 · 80–750 A
CT Inner Ø	Ø10 – 51 mm (6 options)

CONNECTIVITY & FEATURES

Connectivity	Wi-Fi + Ethernet + BLE
Relay	Dry contact · 3 A / 5 A
Reporting Cycle	15 s · Relay status instant
Accuracy	V ±1% · I ±1% / ±2%
Mount & Size	35 mm DIN · 19 × 69 × 90 mm
Certification	CE



Works with the Tuya App & Home Assistant

Remote relay control · Real-time & historical data · Automation scenes

PLUG & PLAY

RELAY ON/OFF

AUTOMATION SCENES

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PC4713-W · THREE-PHASE

TRIOCLIP OPEN



DIRECT-TO-CLOUD THREE-PHASE MONITOR

Three-phase energy data, straight to your cloud

HTTP / MQTT / Modbus TCP over Wi-Fi — report real-time data directly to your own cloud or local server, no third-party cloud and no App required.

**Open API · Wi-Fi**

HTTP / MQTT / Modbus TCP — report straight to your own cloud or local server.

**Three-Phase · Whole Home**

Three-Phase Four-Wire, split-phase & single-phase compatible, with 3 CTs.

**Four-Quadrant · RMS / PQS**

Voltage, current, power factor, frequency, active / reactive / apparent power/ reapparent power.

**Real-Time · 50 ms Refresh**

Fast data refresh for live reading and seamless platform integration.

**Offline Storage · Minute-Level**

Data buffered locally, automatically re-reported after reconnection.

**Web Config · No App**

Browser direct access — OTA, data erase, remote reboot and CT setting.

SPECIFICATIONS

System	1P / Split / 3P 4W 3P3W & Delta not supported
Nominal Voltage	3×230/400 V AC · 50/60 Hz
Voltage Range	90–277 V
CTs	Max 3 · 80–750 A Ø10 – 51 mm (6 options)

CONNECTIVITY & FEATURES

Connectivity	Wi-Fi (HTTP / MQTT / Modbus TCP)
Data Refresh	50 ms
Report Time	Set in integration
Accuracy	V ±1% · I ±1% / ±2%
Mount & Size	35 mm DIN · 19 × 69 × 90 mm

Certification

**Open API · No App Required**

HTTP · MQTT · Modbus TCP · HA integration · Demand metering (optional)

WEB CONFIG

OTA

50 ms REFRESH

**Works with Home Assistant**

Home assistant integration

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PC4713-W-485 · THREE-PHASE · RS485

TRIOCLIP OPEN



THREE-PHASE MONITOR · WI-FI & RS485

Three-phase monitoring with Wi-Fi + RS485

Wi-Fi (HTTP / MQTT / Modbus TCP) plus a Modbus RTU RS485 port — connect to your platform over the air or over a wired bus.

**Wi-Fi + RS485**

Modbus RTU over RS485 for wired industrial integration alongside Wi-Fi.

**Modbus RTU · Max 50 ms**

Fast response for demanding control and monitoring loops.

**Three-Phase · Whole Home**

Three-Phase Four-Wire, split-phase & single-phase compatible, with 3 CTs.

**Four-Quadrant · RMS / PQS**

Voltage, current, power factor, frequency, active / reactive / apparent power/ reapparent power.

**Offline Storage · Minute-Level**

Data buffered locally, automatically re-reported after reconnection.

**Web Config · No App**

Browser direct access — OTA, data erase, remote reboot and CT setting.

SPECIFICATIONS

System	1P / Split / 3P 4W 3P3W & Delta not supported
Nominal Voltage	3×230/400 V AC · 50/60 Hz
Voltage Range	90–277 V
CTs	Max 3 · 80–750 A Ø10 – 51 mm (6 options)

CONNECTIVITY & FEATURES

Connectivity	Wi-Fi + RS485 HTTP / MQTT / Modbus TCP · Modbus RTU
Data Refresh	50 ms
Response Time	Max 50 ms (RTU)
Accuracy	V ±1% · I ±1% / ±2%
Mount & Size	35 mm DIN · 19 × 69 × 90 mm
Certification	

Open API · No App Required

RS485 Modbus RTU · HTTP / MQTT / Modbus TCP · HA integration

RS485 · MODBUS RTU

50 ms RESPONSE

OTA

**Works with Home Assistant**

Home assistant integration

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PC4711-W-485 · SINGLE-PHASE · RS485

UNICLIP OPEN



SINGLE-PHASE MONITOR · WI-FI & RS485

Single-phase monitoring with Wi-Fi + RS485

Measure usage and solar production on a single-phase circuit — Wi-Fi for your platform, RS485 Modbus RTU for wired integration.

**Wi-Fi + RS485**

HTTP / MQTT / Modbus TCP plus Modbus RTU in one compact meter.

**2 Open-Type CTs · No Rewiring**

Clip around existing cables — no power cut, non-intrusive installation.

**Four-Quadrant · RMS / PQS**

Voltage, current, power factor, frequency, active/reactive/apparent power/reapparent power.

**Modbus RTU · Max 50 ms**

Fast response ideal for BMS / EMS and control applications.

**Offline Storage · Minute-Level**

Data buffered locally, automatically re-reported after reconnection.

**Web Config · No App**

Browser direct access — OTA, data erase, remote reboot and CT setting.

SPECIFICATIONS

System	Single-Phase
Nominal Voltage	230 V AC · 50/60 Hz
Voltage Range	90–277 V
CTs	Max 2 · 80–750 A Ø10 – 51 mm (6 options)

CONNECTIVITY & FEATURES

Connectivity	Wi-Fi + RS485 HTTP / MQTT / Modbus TCP · Modbus RTU
Data Refresh	50 ms
Response Time	Max 50 ms (RTU)
Accuracy	V ±1% · I ±1% / ±2%
Mount & Size	35 mm DIN · 19 × 69 × 90 mm
Certification	CE

Open API · No App Required

RS485 Modbus RTU · HTTP / MQTT / Modbus TCP · HA integration

RS485 · MODBUS RTU

50 ms RESPONSE

OTA

**Works with Home Assistant**

Home assistant integration

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