

DIN Rail Smart Switch

TO-Q-SY1 TO-Q-SY2 Series



Communication method:
 W - Wi-Fi, R - RS 485
 Z - Zigbee, L - LTE, M - Matter

Rated Current:
 6, 10, 16, 20, 25, 32, 40, 50, 63

Series Code

TO
 Company Code

Q-SY1

J

Blank:
 Without Metering Function
 L:
 With Metering Protection

W

Platform Technical Support:
 T - Tuya, E - eWeLink
 X - Mi, C - Customized
 M - Tasmota

T

63

DC

Ambient Voltage:
 Blank: Alternating Current
 DC: Direct Current

DIN Rail Smart Switch TO-Q-SY1 TO-Q-SY2 Series

The TO-Q-SY1 and TO-Q-SY2 are rail-mounted smart series switches, compact in size and versatile in application. They address the issue of limited installation space in circuits, transforming traditional distribution boxes into smart ones. They feature low power consumption, power consumption monitoring, over and under voltage protection, temperature protection, overcurrent protection, and integration with intelligent automation systems.



**Remote
Control**



**Voice
Control**



**Time
Mode**



**Circuit
Protection**



**Electricity
Consumption**



**Real-Time
Power / Current / Voltage**



**Temperature
Protection**



**Operation
Log**

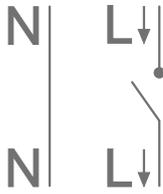


**DIN Rail
Installation**



**Maintenance
Mode**

I TO-Q-SY1 Non-Metering Type



RDT+RELAY

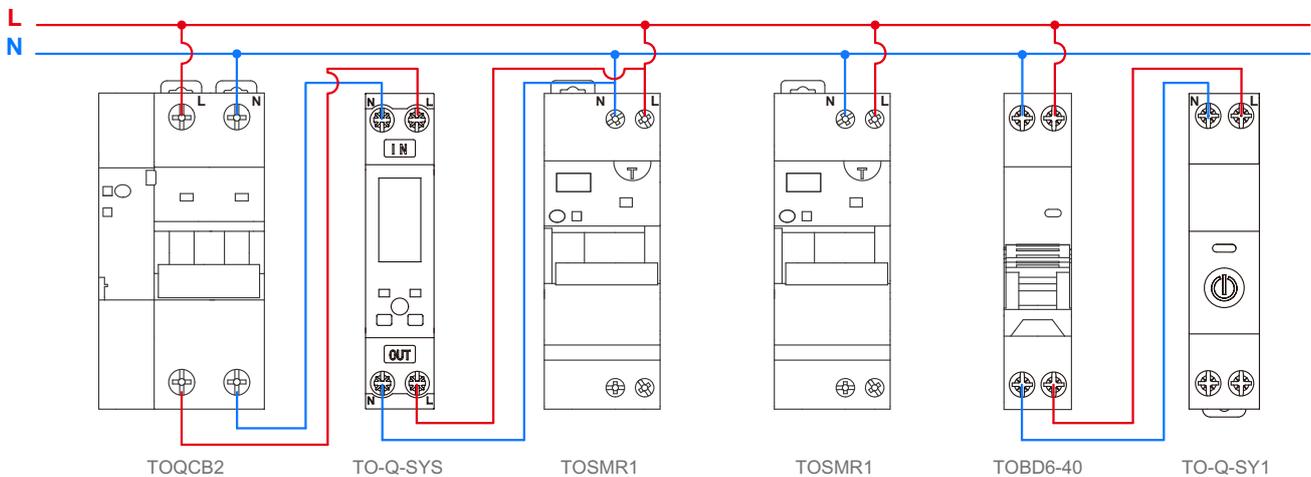


LED Indicator

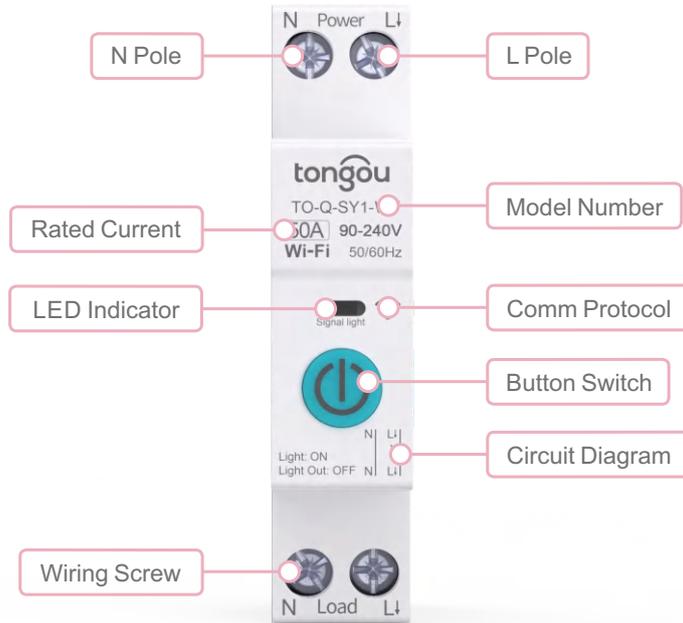
- The LED indicator flashing blue indicates the network pairing mode.
- The LED indicator solid blue shows the switch is on.
- The LED off indicates the switch is off.

| PRODUCT MODEL | TO-Q-SY1-W | TO-Q-SY1-Z | TO-Q-SY1-L | TO-Q-SY1-M |
|---|---|--|------------|------------|
| Standards | IEC/EN 60947, IEC/EN 50557, EN 301 489, EN 300 328, EN IEC 61000 | | | |
| Wiring Mode | DPN 18mm | | | |
| Poles Description | Disconnectable L Pole, Direct N Pole | | | |
| Operating Rated Voltage | Ue (V) | AC 90 - 240V | | |
| Frequency | Hz | 50/60Hz | | |
| Rated Current | In (A) | 6, 10, 16, 20, 25, 32, 40, 50, 63 | | |
| Operational Safety | Remote setting maintenance switch: which can be set via Apps or other ports to prevent remote accidental switch activation. It requires four consecutive presses to exit maintenance mode | | | |
| Communication Protocol | TO-Q-SY1-W | TCP/IP: Wi-Fi (2.412~2.484GHz) IEEE 802.11b/g/n | | |
| | TO-Q-SY1-Z | Zigbee (2.400~2.483GHz) IEEE 802.15.4 | | |
| | TO-Q-SY1-L | LTE Cat.1: LTE-FDD: B1/B3/B5/B8 LTE-TDD: B34/38/39/40/41 (2535~2655MHz) LTE-FDD: B1/B3/B5/B7/B8/B20/B28A* LTE-TDD: B38/40/41 GSM/GPRS: GSM900/DCS1800 | | |
| | TO-Q-SY1-M | TCP/UDP: Matter | | |
| Energy Consumption Measurement Accuracy | None | | | |
| Function Description | Multiple Timing, Remote Control, Voice Control | | | |
| Mounting Support | DIN Rail 35mm | | | |

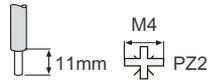
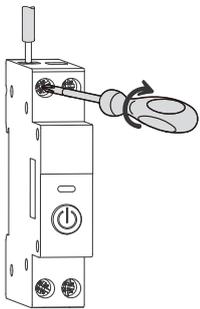
Wiring Diagram



I TO-Q-SY1 Metering Type

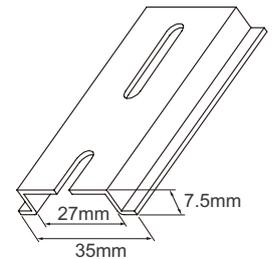
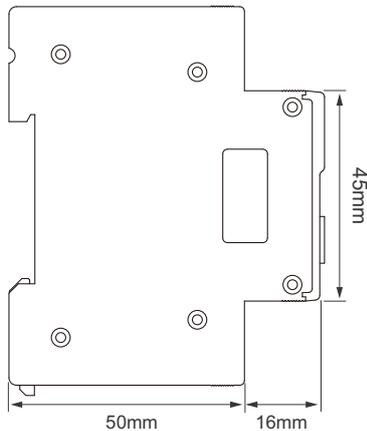
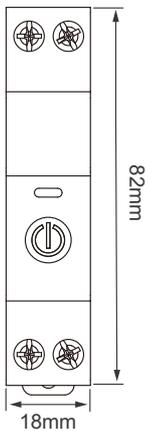


Connection

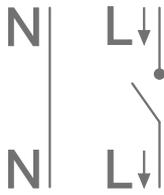


| Rating | Tightening torque | Copper cables | |
|---------|-------------------|-----------------------|-----------------------|
| | | Rigid | Flexible or ferrule |
| 1 - 50A | 1.8 N.m | 1 - 16mm ² | 1 - 10mm ² |
| 63A | 1.8 N.m | 16mm ² | / |

Dimensions (mm)



I TO-Q-SY1 Metering Type



RDT+RELAY

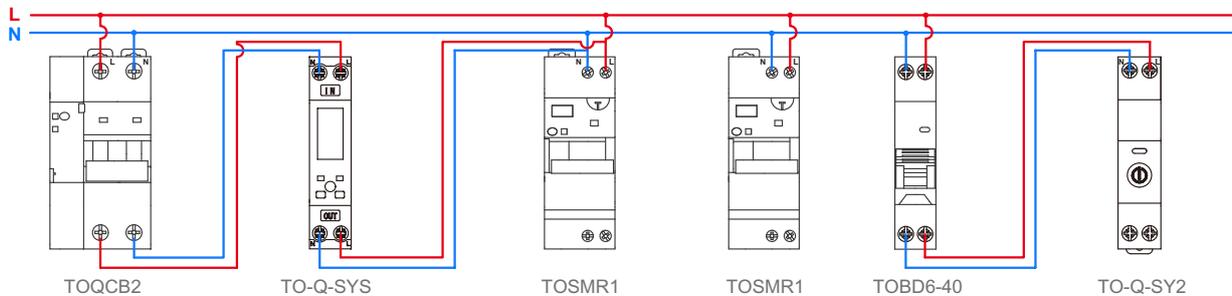


LED Indicator

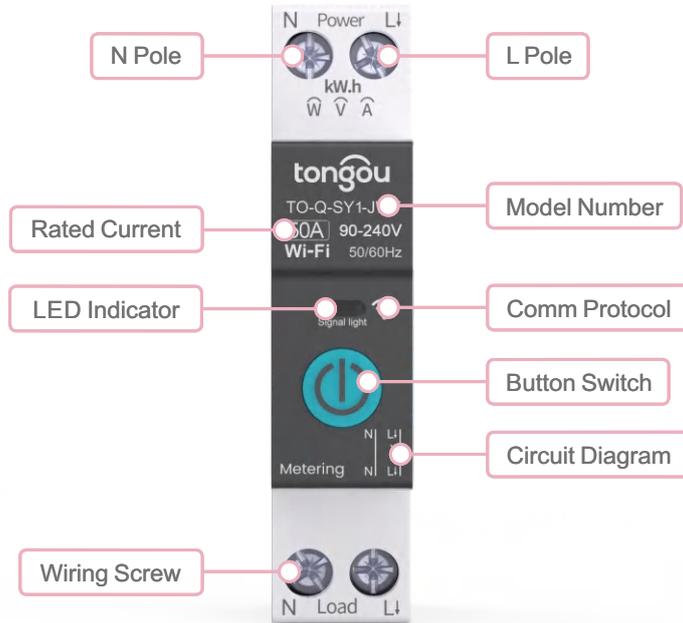
- The LED indicator flashing blue indicates the device is in pairing mode.
- The LED solid blue shows the network is connected.
- The LED off indicates no network connection.
- The button indicator solid red indicates the switch is on.
- The button indicator off indicates the switch is off.

| PRODUCT MODEL | TO-Q-SY1-JW | TO-Q-SY1-JZ | TO-Q-SY1-JL | TO-Q-SY1-JM |
|---|---|--|-------------|-------------|
| Standards | IEC/EN 60947, IEC/EN 50557, EN 301 489, EN 300 328, EN IEC 61000 | | | |
| Wiring Mode | DPN 18mm | | | |
| Poles Description | Disconnectable L Pole, Direct N Pole | | | |
| Operating Rated Voltage | Ue (V) | AC 90 - 240V | | |
| Frequency | Hz | 50/60Hz | | |
| Rated Current | In (A) | 6, 10, 16, 20, 25, 32, 40, 50, 63 | | |
| Operational Safety | Remote setting maintenance switch: which can be set via Apps or other ports to prevent remote accidental switch activation. It requires four consecutive presses to exit maintenance mode | | | |
| Communication Protocol | TO-Q-SY1-JW | TCP/IP: Wi-Fi (2.412~2.484GHz) IEEE 802.11b/g/n | | |
| | TO-Q-SY1-JZ | Zigbee (2.400~2.483GHz) IEEE 802.15.4 | | |
| | TO-Q-SY1-JL | LTE Cat.1: LTE-FDD: B1/B3/B5/B8 LTE-TDD: B34/38/39/40/41 (2535~2655MHz) LTE-FDD: B1/B3/B5/B7/B8/B20/B28A* LTE-TDD: B38/40/41 GSM/GPRS: GSM900/DCS1800 | | |
| | TO-Q-SY1-JM | TCP/UDP: Matter | | |
| Energy Consumption Measurement Accuracy | Class 2.0 | | | |
| Monitoring Physical Data | Real-time Voltage, Real-time Current, Real-time Power (Forward), Power Consumption (Forward), Switch State, Device Operating Status | | | |
| Function Description | Multiple Timing, Remote Control, Voice Control | | | |
| Mounting Support | DIN Rail 35mm | | | |

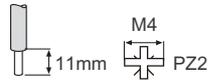
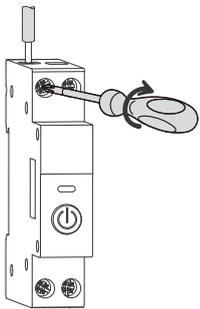
Wiring Diagram



I TO-Q-SY1 Metering Type

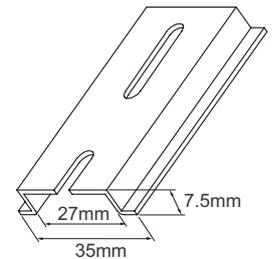
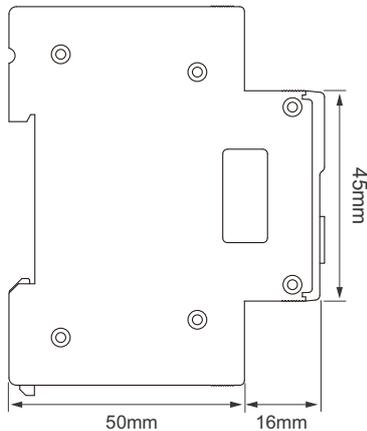
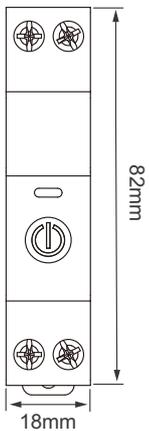


Connection



| Rating | Tightening torque | Copper cables | |
|---------|-------------------|---|---|
| | | Rigid | Flexible or ferrule |
| 1 - 50A | 1.8 N.m |  |  |
| 63A | 1.8 N.m | 16mm ² | / |

Dimensions (mm)



TO-Q-SY2

⚡ Over-Current Protection

Threshold Setting: 1A - 63A
 Status Setting: Off/Alarm/Trip
 Electronic Component Response Time: 5s

+⚡ Over-Voltage Protection

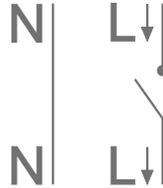
Threshold Setting: 245V - 295A
 Status Setting: Off/Alarm/Trip
 Electronic Component Response Time: 5s

-⚡ Under-Voltage Protection

Threshold Setting: 145V - 220A
 Status Setting: Off/Alarm/Trip
 Electronic Component Response Time: 5s

📶 High Power Protection

Threshold Setting: 1KW - 26KW
 Status Setting: Off/Alarm/Trip
 Electronic Component Response Time: 5s



RDT+RELAY+UVP/OVP+ECM

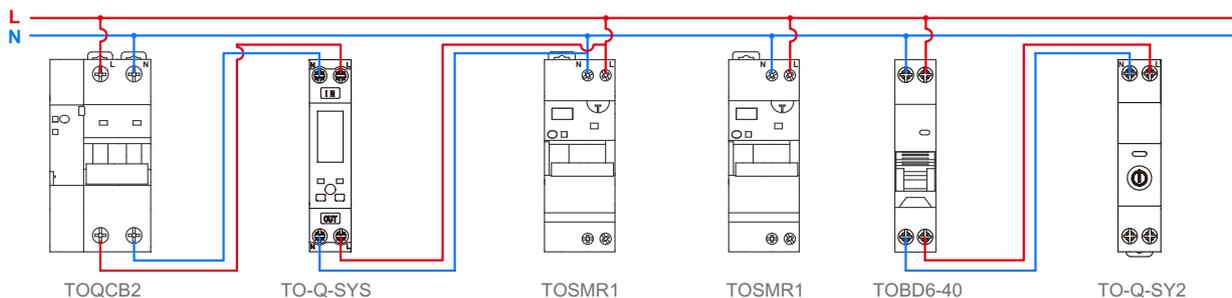


LED Indicator

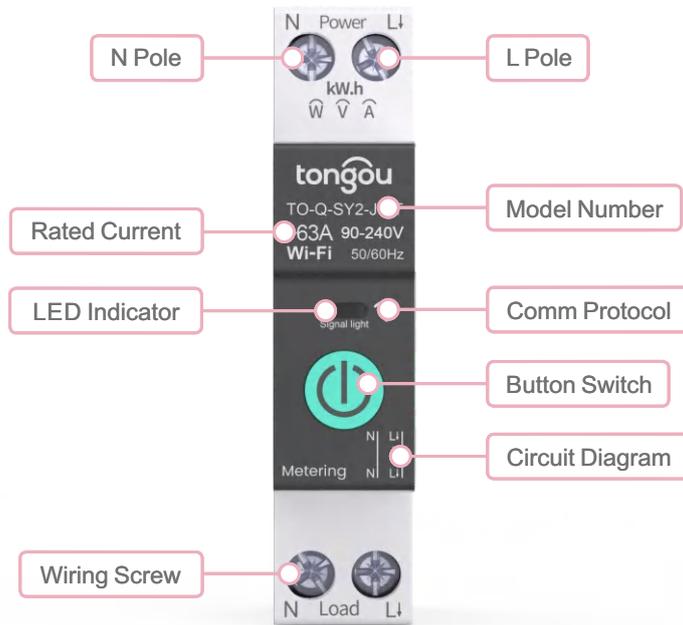
- 🔦: The LED indicator flashing blue indicates the device is in pairing mode.
- 🔦: The LED solid blue shows the network is connected.
- 🔦: The LED off indicates no network connection.
- 🔴: The button indicator solid red indicates the switch is on.
- ⏻: The button indicator off indicates the switch is off.

| PRODUCT MODEL | TO-Q-SY2-JW | TO-Q-SY2-JZ | TO-Q-SY2-JL | TO-Q-SY2-JM |
|---|---|--|-------------|-------------|
| Standards | IEC/EN 60947, IEC/EN 50557, EN 301 489, EN 300 328, EN IEC 61000 | | | |
| Wiring Mode | DPN 18mm | | | |
| Poles Description | Disconnectable L Pole, Direct N Pole | | | |
| Operating Rated Voltage Ue (V) | AC 90 - 240V | | | |
| Frequency Hz | 50/60Hz | | | |
| Current Frame In (A) | 63 | | | |
| Operational Safety | Remote setting maintenance switch: which can be set via Apps or other ports to prevent remote accidental switch activation. It requires four consecutive presses to exit maintenance mode | | | |
| Communication Protocol | TO-Q-SY2-JW | TCP/IP: Wi-Fi (2.412~2.484GHz) IEEE 802.11b/g/n | | |
| | TO-Q-SY2-JZ | Zigbee (2.400~2.483GHz) IEEE 802.15.4 | | |
| | TO-Q-SY2-JL | LTE Cat.1: LTE-FDD: B1/B3/B5/B8 LTE-TDD: B34/38/39/40/41 (2535~2655MHz) LTE-FDD: B1/B3/B5/B7/B8/B20/B28A* LTE-TDD: B38/40/41 GSM/GPRS: GSM900/DCS1800 | | |
| | TO-Q-SY2-JM | TCP/UDP: Matter | | |
| Energy Consumption Measurement Accuracy | Class 2.0 | | | |
| Monitoring Physical Data | Real-time Voltage, Real-time Current, Real-time Power (Forward), Power Consumption (Forward), Switch State, Device Operating Status | | | |
| Function Description | Multiple Timing, Over-voltage Protection, Under-voltage Protection, Over-current Protection, Over-Power Protection, Temperature protection, Remote Control, Voice Control | | | |
| Mounting Support | DIN Rail 35mm | | | |

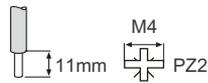
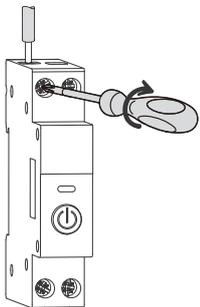
Wiring Diagram



I TO-Q-SY1 Metering Type



Connection



| Rating | Tightening torque | Copper cables | |
|---------|-------------------|---|---|
| | | Rigid | Flexible or ferrule |
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Dimensions (mm)

