

# **EVIQtech**

## **SwiGO SuperSmart**

### Complete User Manual

---

IoT Switch with Power Sensor for High-Power Appliances  
Water Pumps | Motors | Heaters | Lighting & More  
Single-phase up to 20A/5kW (built-in) | Up to 40A/30HP 3-phase with external CT

Version 1.0 | March 2026

[www.eviqtech.com](http://www.eviqtech.com)

# Table of Contents

## 1. Introduction

- 1.1 Key Features
- 1.2 Product Variants
- 1.3 Technical Specifications
- 1.4 What's in the Box
- 1.5 System Requirements

## 2. Hardware Overview

- 2.1 Terminals (Rear)
- 2.2 Front Panel Buttons
- 2.3 Button Combinations
- 2.4 Fault Indicators (LED)
- 2.5 Connection Diagrams

## 3. Getting Started

- 3.1 Installing the App
- 3.2 Enabling Bluetooth and WiFi
- 3.3 The Three Access Modes

## 4. Mode A — Local AP Mode

## 5. Mode B — WiFi Network Mode

## 6. Mode C — BLE Pairing + WiFi + Cloud

- 6.1 Prerequisites
- 6.2 Activating BLE Mode
- 6.3–6.5 Scanning and Selecting
- 6.6–6.7 Configuring the Device
- 6.8–6.9 Cloud Verification

## 7. Using the Local App Interface

- 7.1 Unlocking the Device
- 7.2 Home Page
- 7.3 Navigation Icons
- 7.4 Schedules Page
- 7.5 Protection Settings
- 7.6 Settings Page
- 7.7 Float Switch & Flow Switch

7.8 Master–Remote Control

## **8. Cloud Dashboard**

8.1 Logging In

8.2 Multi-Device Overview

8.3 Remote Control

8.4–8.5 Analytics

8.6 Energy Chart

8.7 Cloud Scheduling

## **9. Browser Access (iOS & Other Devices)**

9.1 Access via Local AP Mode

9.2 Access via Local WiFi Mode

9.3 What You Can Do via Browser

## **10. Troubleshooting**

## **11. Support and Contact**

# 1. Introduction

The EVIQtech SwiGO SuperSmart is an advanced IoT-enabled motor controller and protector designed for Indian 2-module wall boxes. It controls and protects single-phase loads up to 20A/5kW with its built-in relay, or up to 40A/30HP three-phase loads when used with an external CT (Current Transformer). The device combines intelligent motor protection with smart connectivity, allowing you to monitor and control motor-driven equipment locally, over WiFi, or from anywhere via the cloud.

## 1.1 Key Features

- Real-time voltage, current, power, and energy monitoring (V, A, W, kWh)
- Timer-based ON/OFF control with countdown display and four preset buttons
- Scheduling with daily, weekly, and cyclic time windows
- Over-voltage and under-voltage protection with configurable limits
- Over-current (overload) and under-current (dry-run) protection
- Maximum run duration configuration
- Local AP mode for field/farm use without any WiFi or internet
- WiFi network mode for local home/office control
- Bluetooth Low Energy (BLE) pairing for quick setup
- Cloud connectivity via EVIQtech Cloud (powered by ThingsBoard v4.1.0)
- Remote control from anywhere with activity logging
- Multi-device management from a single app
- Float switch and flow switch support (5V DC)
- Master-Remote control configuration for multi-device setups
- Firmware update capability via the app (OTA)
- Session and cumulative energy metering

## 1.2 Product Variants

The SwiGO SuperSmart is available in four timing variants. The button timings listed below apply to the physical buttons on the device only. When using the web app or cloud dashboard, any duration in hours and minutes can be set regardless of variant.

Model	Button 1 (Green)	Button 2 (Yellow)	Button 3 (Blue)	Button 4 (Violet)
EDS031	5 min	10 min	15 min	20 min
EDS032	15 min	30 min	45 min	60 min
EDS033	1 hr	2 hr	3 hr	4 hr
EDS034	4 hr	8 hr	12 hr	16 hr

## 1.3 Technical Specifications

Specification	Details
Rated Voltage	250V AC 50Hz
Maximum Switching Voltage	290V AC
Maximum Withstand Voltage	440V AC
Cut-Off Voltage	Below 170V AC or above 290V AC
Maximum Current (Built-in)	20A / 3HP / 5kW
Maximum Current (External CT)	40A / 30HP Three Phase
DC Output for Float Switch	5V DC only
Mounting	Flush / Surface mount in standard Indian 2-module box
Suitable For	Indian 2-module box (surface-mountable)
Standard	IS/IEC 60669-2
Color	White
Weight	225g
Dimensions	87 x 87 x 45mm
Terminal Size	2.5 sq mm x 2
Warranty	1 Year

## 1.4 What's in the Box

The SwiGO SuperSmart comes ready for installation in a standard Indian 2-module electrical box. The device is designed for surface-mountable 2-module boxes commonly used in Indian residential and commercial wiring. Contents:

- SwiGO SuperSmart unit (1x) — fits standard Indian 2-module surface-mount box
- CR1220 Battery (1x) — included in box; customer to install for RTC backup
- Quick Start Guide
- Mounting hardware

## 1.5 System Requirements

- Android smartphone (Android 8.0 or later)
- EVIQtech app (available on Google Play Store)
- 2.4 GHz WiFi network (for WiFi and cloud modes)
- Bluetooth 4.0+ enabled on your phone (for BLE pairing)
- EVIQtech cloud account (for remote/cloud features)

## 2. Hardware Overview

### 2.1 Terminals (Rear)

The rear of the SwiGO SuperSmart has the following terminal connections:

- **LINE → IN:** Live/Phase incoming from mains supply
- **N:** Neutral — two terminals both marked N; use one for incoming supply neutral and the other for looping neutral to the load
- **LINE → OUT:** Live/Phase output to load (motor, pump, heater, etc.)
- **5V DC Red & Black wires:** Float switch supply — 5V DC ONLY
- **Green wire:** Earth connection

#### Note:

Both neutral terminals are simply marked N. They are internally connected. You only need to connect the incoming supply neutral to one terminal. The second N terminal is provided for convenience (e.g., looping neutral to another socket). Since this is a single-pole switch, neutral is not switched — the load neutral is typically already available at the load side.

#### WARNING:

Never connect the 5V DC float switch wires to AC mains (220V). Doing so will damage the device and void the warranty. These wires output 5V DC only and must be connected directly to a float

### 2.2 Front Panel Buttons

The front panel has five buttons with color-coded functions:

Button	Color	Function
Button 1	Green	Timer — duration per variant (see Section 1.2)
Button 2	Yellow	Timer — duration per variant
Button 3	Blue	Timer — duration per variant
Button 4	Violet	Timer — duration per variant
Button 5	Red (right)	Manual OFF / Stop

## 2.3 Button Combinations — System Functions

Special button combinations provide system-level functions:

Combination	Hold	LED	Function
Green + Yellow	5 sec	Blue blinks	Activate BLE pairing mode
Red (alone)	10 sec	Blue LED on	Activate Parallel AP mode
Violet + Red	10 sec	Blue LED on	Remove WiFi settings, return to AP mode
Yellow + Blue + Red	20 sec	Blue LED on	Full factory reset — clears ALL settings

### Important:

A full factory reset (Yellow + Blue + Red) erases all settings including WiFi, name, PIN, cloud

## 2.4 Fault Indicators (LED)

Fault	LEDs	Colors	Timing
Dry-run (under-current)	LED 1 + Right RED LED	Both RED	Blinks 6s; startup grace 7s; trips after 4s
Overload (over-current)	LED 2 + Right RED LED	Both RED	Blinks 6s; startup grace 7s; trips after 4s
Under-voltage	LED 3 + Right RED LED	LED3 RED, Right RED	Continuous; trips within 7s
Over-voltage	LED 4 + Right RED LED	LED4 RED, Right RED	Continuous; trips within 7s

## 2.5 Connection Diagrams

The SwiGO SuperSmart supports six standard wiring configurations. Each circuit is described below with its connection diagram.

### Note:

For all circuits: the float switch connects to 5V DC terminals only. Both neutral terminals (N) are internally connected — use one or both as convenient. The device is a single-pole switch; neutral is not switched.

### Circuit 1: Heater / Resistive Load

Use this wiring for resistive loads such as water heaters, room heaters, and immersion rods. A simple single-phase connection with live switched through the SwiGO SuperSmart and neutral passed directly to the load.

### ① CIRCUIT DIAGRAM - FOR HEATER

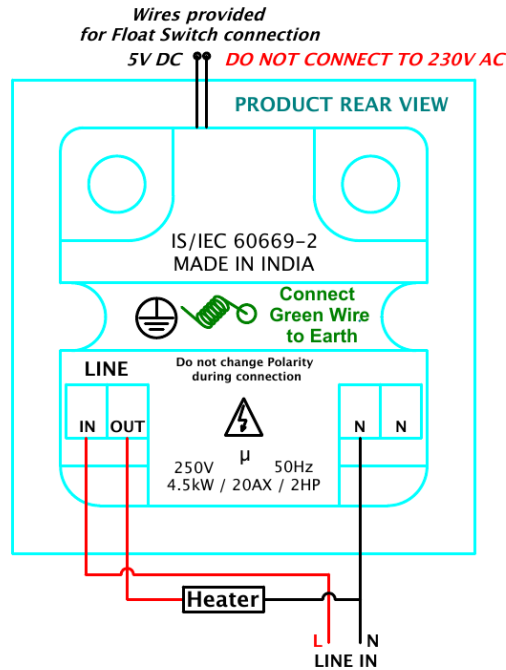


Figure 2.1 — Circuit 1: Heater wiring diagram

From (Supply/Device)		To (Load/Accessory)
Mains Live (Phase)	→	SwiGO LINE → IN
SwiGO LINE → OUT	→	Heater Live terminal
Mains Neutral	→	SwiGO N (either terminal)
SwiGO N (other terminal) or direct	→	Heater Neutral terminal

### Circuit 2: Compound / Street Lighting

For compound lights, street lights, or multiple light circuits. The SwiGO SuperSmart acts as a smart switch for the entire lighting circuit, providing timer and scheduling control.

## ② CIRCUIT DIAGRAM FOR Compound Lighting / Street Lighting

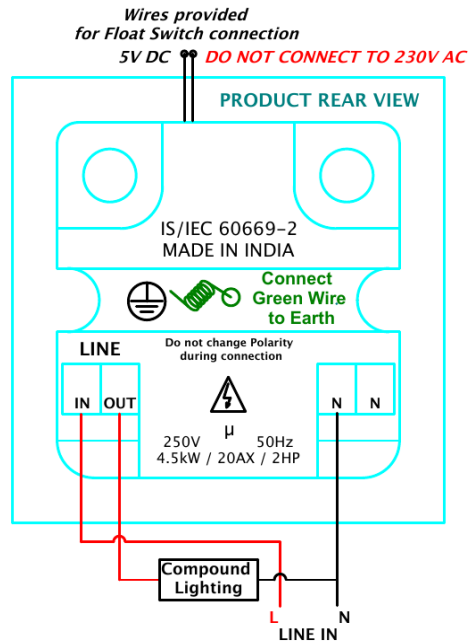


Figure 2.2 — Circuit 2: Compound / Street Lighting wiring diagram

From (Supply/Device)		To (Load/Accessory)
Mains Live (Phase)	→	SwiGO LINE → IN
SwiGO LINE → OUT	→	Lighting circuit Live
Mains Neutral	→	SwiGO N (either terminal)
Neutral bus / direct	→	Lighting circuit Neutral

## Circuit 3: Sump Pump / Monobloc / Single-Phase Motor (Most Common)

The most common wiring for single-phase motors including sump pumps, monobloc pumps, and general-purpose motors. Supports optional float switch for automatic tank-full shutoff.

**③ CIRCUIT DIAGRAM - WITH SUMP / MONOBLOC- 1PH PUMPS**

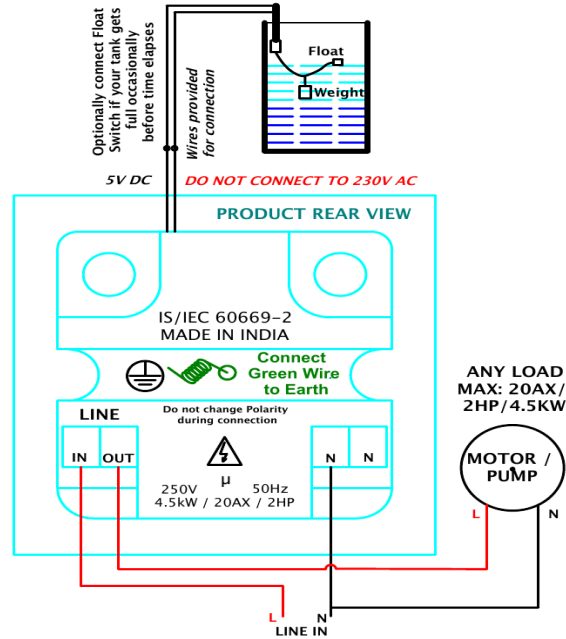


Figure 2.3 — Circuit 3: Sump / Monobloc pump wiring diagram

From (Supply/Device)		To (Load/Accessory)
Mains Live (Phase)	→	SwiGO LINE → IN
SwiGO LINE → OUT	→	Motor/Pump Live terminal
Mains Neutral	→	SwiGO N (either terminal)
SwiGO N (other terminal) or direct	→	Motor/Pump Neutral terminal
SwiGO 5V DC Red wire	→	Float switch wire (see Section 7.7)
SwiGO 5V DC Black wire	→	Float switch wire (see Section 7.7)
SwiGO Green wire	→	Earth connection

### Circuit 4: Energy Monitoring Pass-Through

In this configuration, the SwiGO SuperSmart monitors voltage, current, power, and energy consumption of the load without switching it. The load remains always connected. Useful for energy auditing and monitoring equipment that should not be switched off.

### ④ CIRCUIT DIAGRAM – FOR ENERGY METER

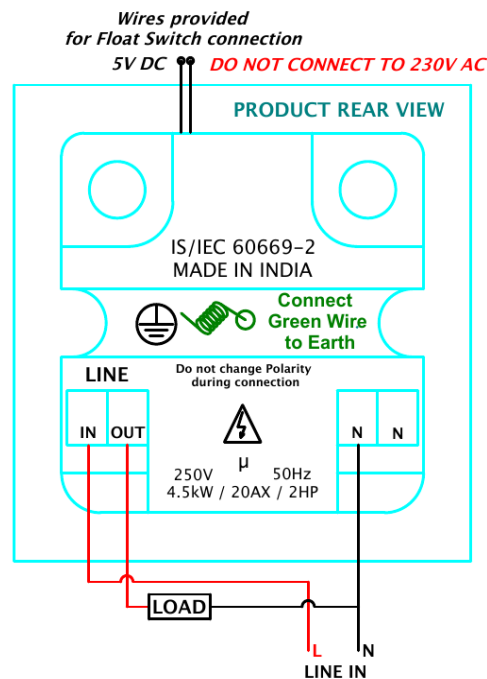


Figure 2.4 — Circuit 4: Energy Meter pass-through wiring diagram

From (Supply/Device)		To (Load/Accessory)
Mains Live (Phase)	→	SwiGO LINE → IN
SwiGO LINE → OUT	→	Load Live (always-on)
Mains Neutral	→	SwiGO N (either terminal)
Direct	→	Load Neutral

**Tip:**

In pass-through mode, disable protection features to prevent the SwiGO SuperSmart from tripping

### Circuit 5: Pressure Pump / Booster Pump — Protection-Only Mode

For pressure pumps and booster pumps where the pump has its own pressure switch. The SwiGO SuperSmart provides over-current, under-current, and voltage protection without interfering with the pump’s built-in pressure-based start/stop logic.

**5** CIRCUIT DIAGRAM - PRESSURE PUMP BOOSTER PUMP CONTROL (SLAVE)

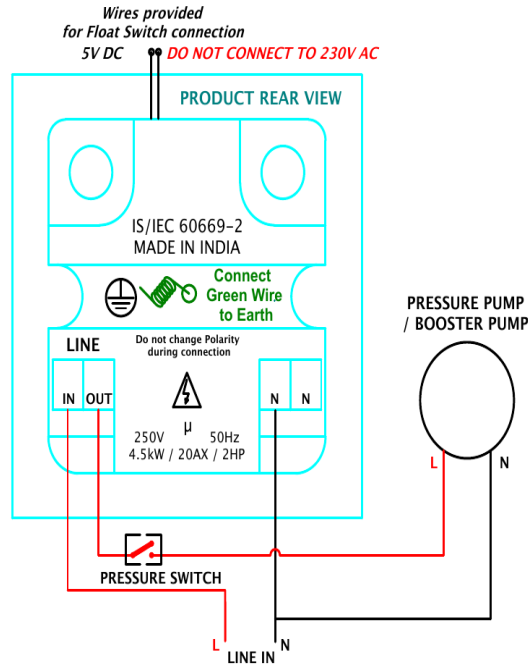


Figure 2.5 — Circuit 5: Pressure Pump wiring diagram

From (Supply/Device)		To (Load/Accessory)
Mains Live (Phase)	→	SwiGO LINE → IN
SwiGO LINE → OUT	→	Pressure switch input
Pressure switch output	→	Pump Live terminal
Mains Neutral	→	SwiGO N (either terminal)
Direct	→	Pump Neutral terminal

**Note:**

Set Max Run Duration to 0 (disabled) when the pump is controlled by its own pressure switch. The SwiGO SuperSmart will only trip on fault conditions.

**Circuit 6: Submersible Pump with EVIQtech Self-Starter**

For submersible pumps paired with the EVIQtech Self-Starter unit. The SwiGO SuperSmart controls and protects the submersible pump while the Self-Starter handles motor starting requirements.

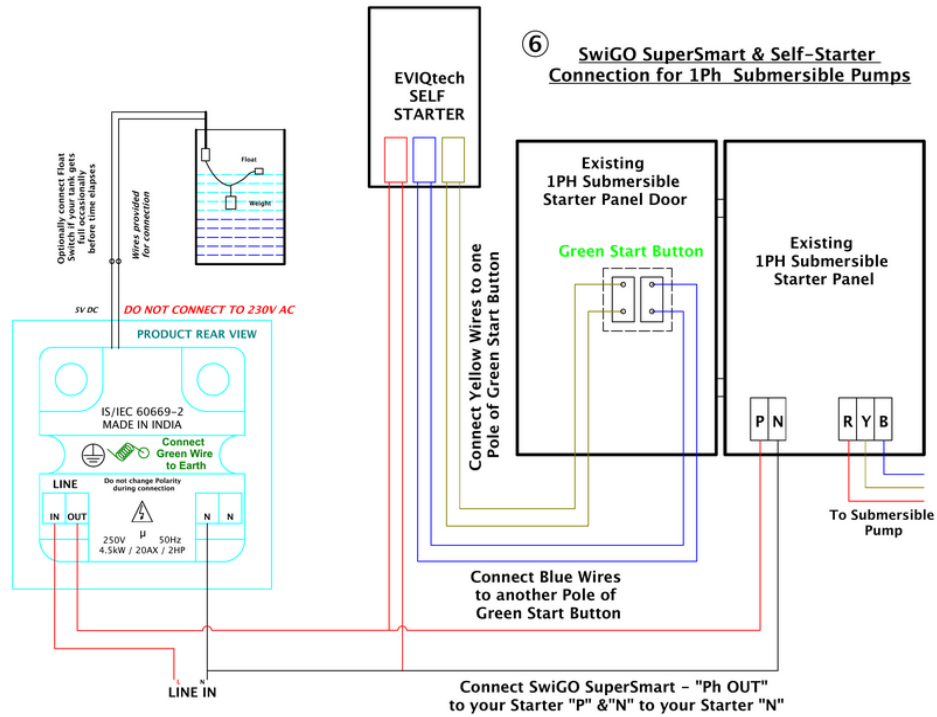


Figure 2.6 — Circuit 6: Submersible Pump + Self- Starter wiring diagram

From (Supply/Device)		To (Load/Accessory)
Mains Live (Phase)	→	SwiGO LINE → IN
SwiGO LINE → OUT	→	Submersible Pump Live and Self- Starter input Live
Self- Starter Yellow & Blue pair wires	→	Existing starter's Start button
Mains Neutral	→	SwiGO N (either terminal)
SwiGO N (other terminal) or direct	→	Self- Starter / Pump Neutral
SwiGO 5V DC wires	→	Float switch (see Section 7.7)
SwiGO Green wire	→	Earth connection

**Important:**

Ensure the Self- Starter is rated for your submersible pump capacity. Refer to the Self- Starter manual for its specific wiring and configuration.

## 3. Getting Started

### 3.1 Installing the EVIQtech App

**Step 1:** Open the Google Play Store on your Android phone.

**Step 2:** Search for "EVIQtech" in the search bar.

**Step 3:** Download and install the EVIQtech app.

**Step 4:** Once installed, locate the EVIQtech app icon on your home screen.



Figure 3.1 — EVIQtech app icon on Android home screen

### 3.2 Enabling Bluetooth and WiFi

The SwiGO SuperSmart uses Bluetooth Low Energy (BLE) for initial setup and WiFi for ongoing communication. Both must be enabled before BLE pairing (Mode C). For AP mode (Mode A), only WiFi is needed.

**Step 1:** Swipe down from the top of your screen to open Quick Settings.

**Step 2:** Ensure both WiFi and Bluetooth are turned ON (highlighted/blue).

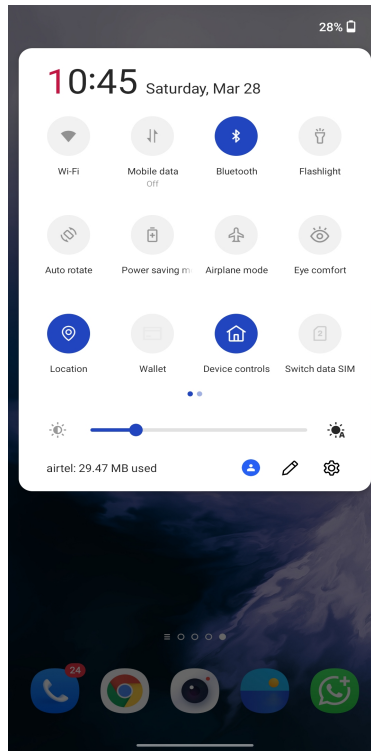


Figure 3.2 — Quick Settings: WiFi and Bluetooth enabled

### 3.3 Understanding the Three Access Modes

Mode	Connection	Internet	Best For
A — Local AP	Direct WiFi AP from device	No	Field, farm, no router
B — WiFi Network	Home/office WiFi router	No	Local home/office control
C — BLE + Cloud	BLE → WiFi → Cloud	Yes (cloud)	Full IoT: remote from anywhere

## 4. Mode A — Local AP Mode

In AP mode, the SwiGO SuperSmart creates its own WiFi access point. Connect and control the device directly without any router or internet. Ideal for field installations, farms, or locations without WiFi.

### 4.1 How AP Mode Works

**Step 1:** Power on the device for the first time (or after WiFi reset). It creates its own AP within ~60 seconds.

**Step 2:** Default AP name: SwiGOss\_AP

**Step 3:** On your phone, go to WiFi settings and connect to the device's AP network.

**Step 4:** Open the EVIQtech app. The device appears as SwiGOss.local at IP 192.168.4.1.

**Step 5:** Enter the default PIN: 1234

**Step 6:** Set a new device name and PIN. The AP will rename to DeviceName\_AP.

**Step 7:** Reconnect to the new AP name and enter your new PIN.

**Note:**

No internet required. Session times out after 10 minutes of inactivity.

**Tip:**

If the configured WiFi network is unavailable, the device falls back to AP mode within 15 seconds.

## 5. Mode B — WiFi Network Mode

In WiFi Network mode, the SwiGO SuperSmart connects to your home/office WiFi router. All devices on the same network can discover and control it. No internet required.

### 5.1 Setting Up WiFi Mode

**Step 1:** Connect to the device in AP mode first (Section 4).

**Step 2:** Navigate to Settings → WiFi settings.

**Step 3:** Enter your router's SSID (network name) and password.

**Step 4:** Tap Save. The device disconnects from AP mode and connects to your router.

**Step 5:** On your phone, reconnect to the same WiFi network.

**Step 6:** Open the EVIQtech app. The device appears with its name and router-assigned IP.

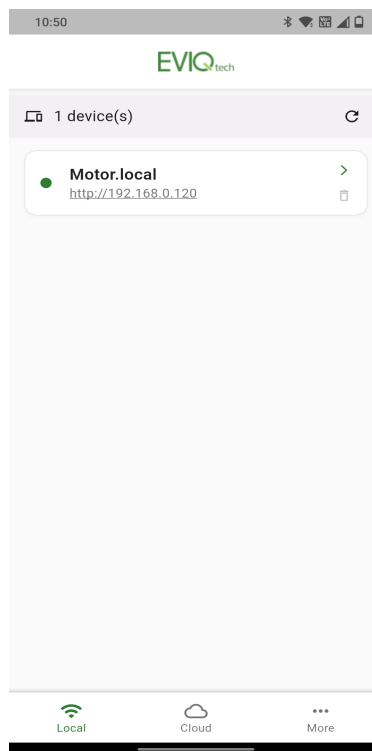


Figure 5.1 — Motor.local at 192.168.0.120 (online)

**Note:**

The device is accessible via DeviceName.local (mDNS) on the same network.

## 6. Mode C — BLE Pairing + WiFi + Cloud

Mode C is the recommended setup for full IoT functionality. It uses Bluetooth Low Energy (BLE) to configure the device, connects it to WiFi, and optionally links it to the EVIQtech Cloud for remote access from anywhere.

### 6.1 Prerequisites

- ✓ SwiGO SuperSmart device powered ON
- ✓ BLE pairing mode activated: Hold Green + Yellow buttons ~5 seconds until blue LED blinks
- ✓ Bluetooth enabled on your Android phone
- ✓ EVIQtech app installed
- ✓ Home WiFi name (SSID) and password ready
- ✓ EVIQtech cloud account email (if enabling cloud)

### 6.2 Activating BLE Pairing Mode

**Step 1:** Press and hold the Green + Yellow buttons on the hardware for approximately 5 seconds.

**Step 2:** Wait until the blue LED starts blinking. BLE pairing mode is now active.

**Step 3:** Proceed quickly to the app — BLE mode is available for a limited time.

### 6.3 Opening the App and Starting BLE Scan

**Step 4:** Open the EVIQtech app.



Figure 6.1 — Open the EVIQtech app

**Step 5:** If no devices found, you'll see "No EVIQTech devices found" with Scan Again.

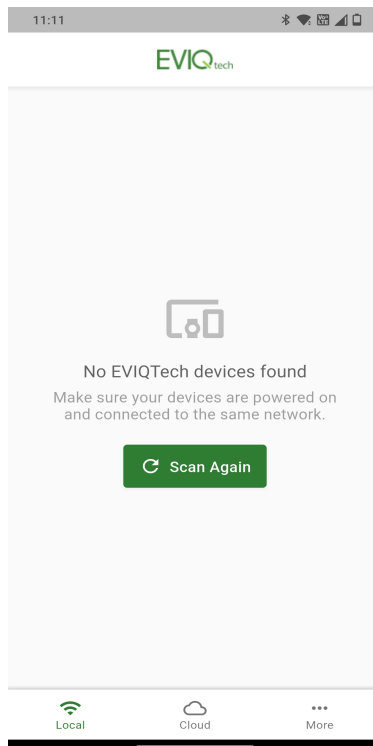


Figure 6.2 — No devices on local network

**Step 6:** Tap the menu in the bottom right corner (...) and select "Add New Device".

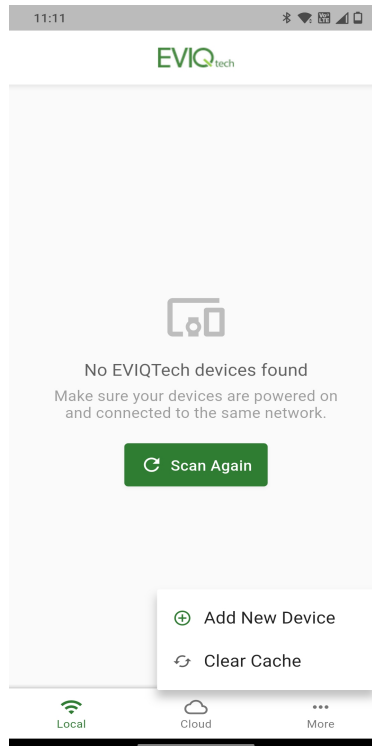


Figure 6.3 — Add New Device / Clear Cache

## 6.4 Granting Permissions

**Step 7:** Tap "Allow" to let EVIQtech find and connect to nearby devices.

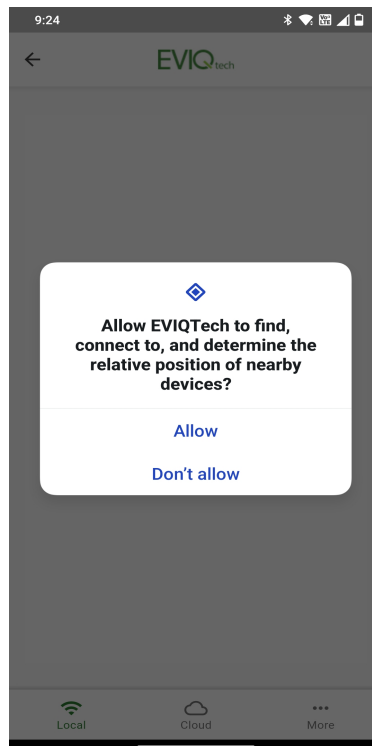


Figure 6.4 — Allow nearby device access

**Step 8:** Select "Precise" location and "While using the app".

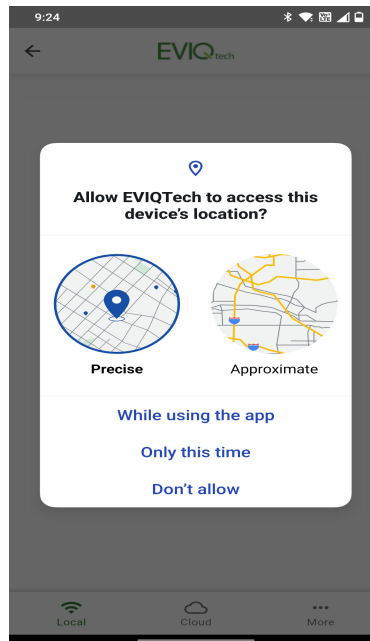


Figure 6.5 — Allow location access (Android BLE requirement)

**Note:**

Android requires location permission for Bluetooth scanning. The app does not track your location.

## 6.5 Scanning and Selecting Your Device

**Step 9:** The app scans via Bluetooth. You'll see "Scanning for devices..."

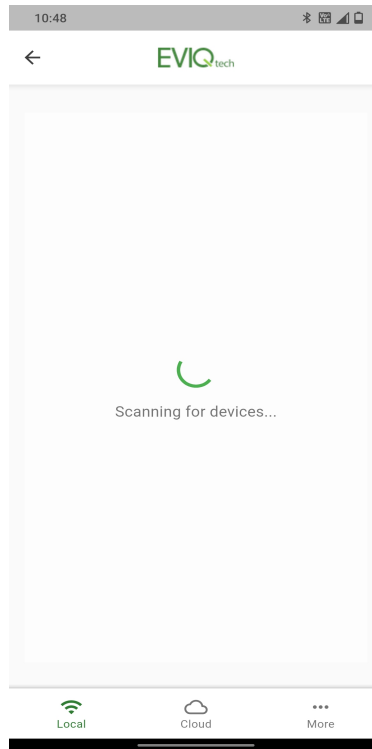


Figure 6.6 — Scanning for BLE devices

**Step 10:** Your device appears with signal strength (Strong/Weak). Tap to select.

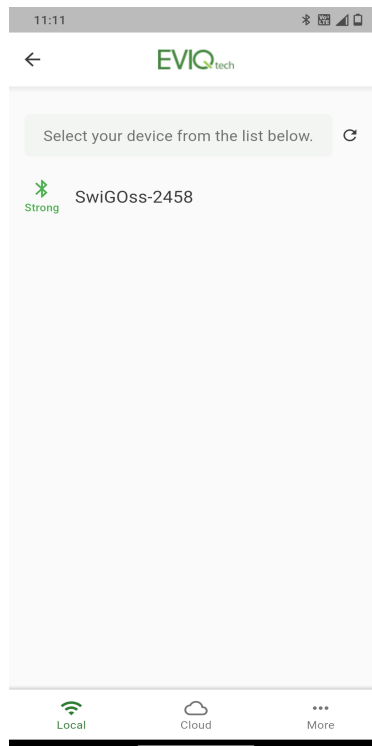


Figure 6.7 — SwiGOss-2458 found (Strong signal)

## 6.6 Configuring (Local Only — Without Cloud)

**Step 11:** Fill in the configuration fields:

- **WiFi Network:** Select your 2.4 GHz home WiFi
- **WiFi Password:** Enter password; tap eye icon to verify
- **Device PIN:** 4-digit PIN (factory default: 1234)
- **Change device name and pin:** Check to customize
- **New Device Name:** e.g., "Motor", "Pump"
- **Connect to cloud:** Leave UNCHECKED for local-only

The screenshot shows a mobile application interface for configuring a SwiGO device. At the top, the status bar shows the time 10:48 and various icons. Below that is a navigation bar with a back arrow and the EVIQtech logo. The main content area is titled 'Configure SwiGOss-2458'. It contains several input fields: 'WiFi Network' (a dropdown menu), 'WiFi Password' (a text field with an eye icon for toggling visibility), 'Device PIN' (a text field with the placeholder 'e.g. 1234'), and a section for 'Change device name and pin' which is checked. This section includes 'New Device Name' (text field with 'SwiGOss-2458') and 'New Device Pin' (text field with 'e.g. 1234'). Below this is an unchecked checkbox for 'Connect to cloud'. A large green 'Connect' button is positioned at the bottom of the form. At the very bottom of the screen is a navigation bar with three icons: 'Local' (WiFi icon), 'Cloud' (cloud icon), and 'More' (three dots icon).

Figure 6.8 — Configure screen (blank)

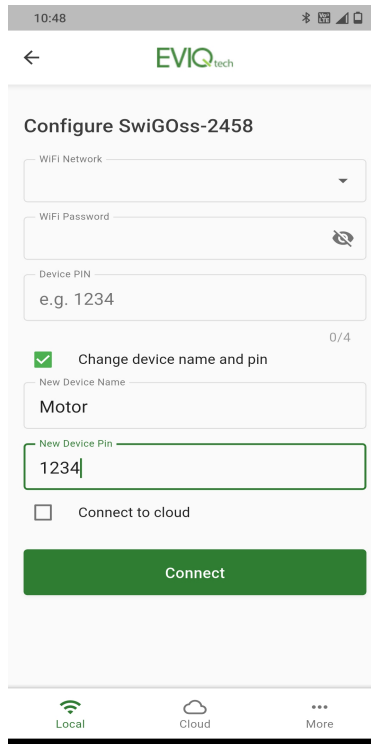


Figure 6.9 — Renamed to Motor, PIN 1234

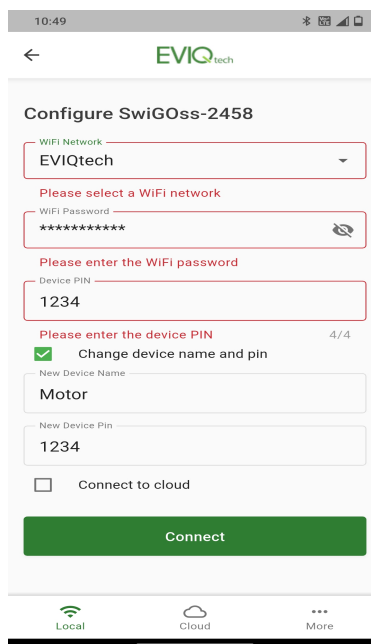


Figure 6.10 — Complete config with WiFi

**Step 12:** Tap "Connect". The device configures and connects to WiFi.

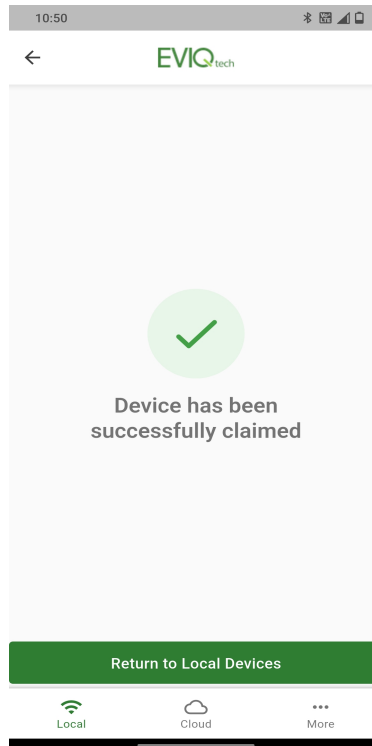


Figure 6.11 — Device successfully claimed

## 6.7 Configuring (With Cloud Connection)

**Step 11:** Fill in all WiFi and device name fields as above.

**Step 12:** Check "Connect to cloud". An Email field appears.

**Step 13:** Enter your EVIQtech cloud account email address.

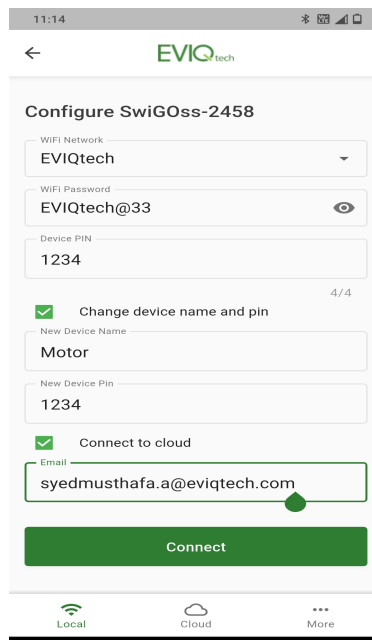


Figure 6.12 — Cloud enabled, password visible

11:16

← EVIQtech

Configure SwiGOss-2458

WiFi Network  
EVIQtech

WiFi Password  
\*\*\*\*\*

Device PIN  
1234

4/4

Change device name and pin

New Device Name  
Motor

New Device Pin  
1234

Connect to cloud

Email  
syedmusthafa.a@eviqtech.com

Connect

Local Cloud More

Figure 6.13 — Cloud enabled, password hidden

**Important:**

Ensure the email matches your EVIQtech cloud account exactly. The device will be linked to this

**Step 14:** Tap "Connect".

## 6.8 Cloud Verification and Provisioning

**Step 15:** "Cloud connection is verified. Updating device..." appears during provisioning.

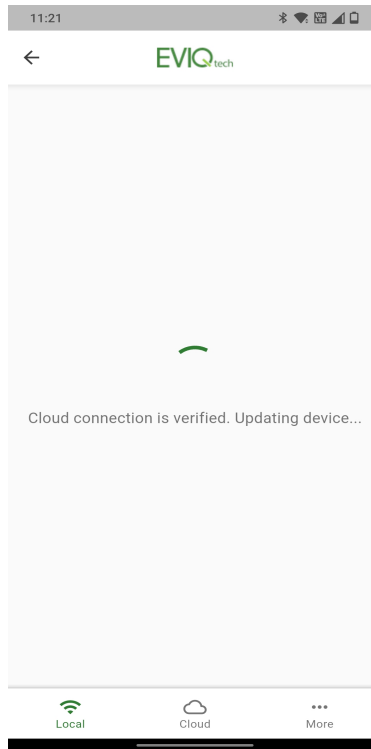


Figure 6.14 — Cloud verifying and provisioning

**Step 16:** Success: "Device has been successfully claimed" — cloud is connected.

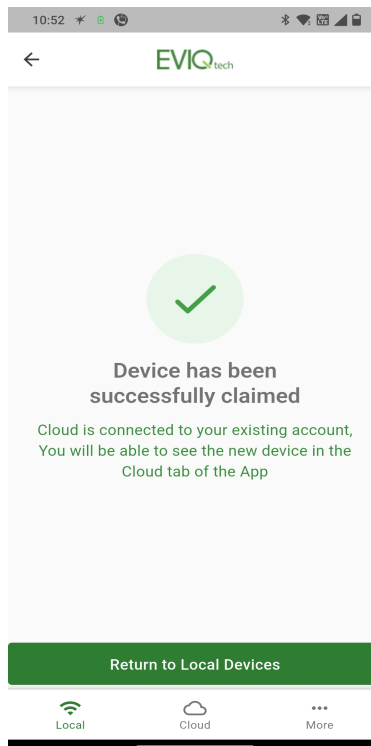


Figure 6.15 — Claimed with cloud confirmed

## 6.9 Verifying WiFi and Local Access

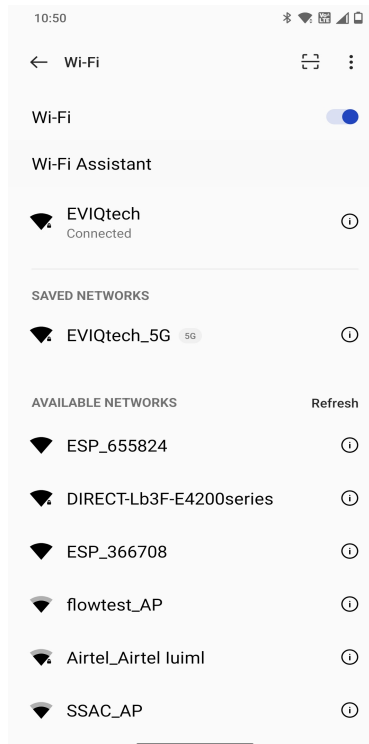


Figure 6.16 — Phone on EVIQtech WiFi

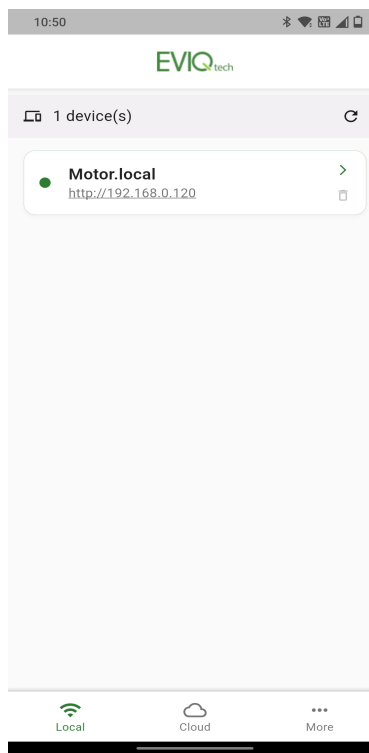


Figure 6.17 — Motor.local at 192.168.0.120

## 7. Using the Local App Interface

The EVIQtech app has three bottom tabs: Local, Cloud, and More. This section covers the Local interface.

### 7.1 Unlocking the Device

**Step 1:** Tap your device in the Local devices list.

**Step 2:** Enter your 4-digit PIN and tap "Unlock". Check "Remember PIN" for convenience.

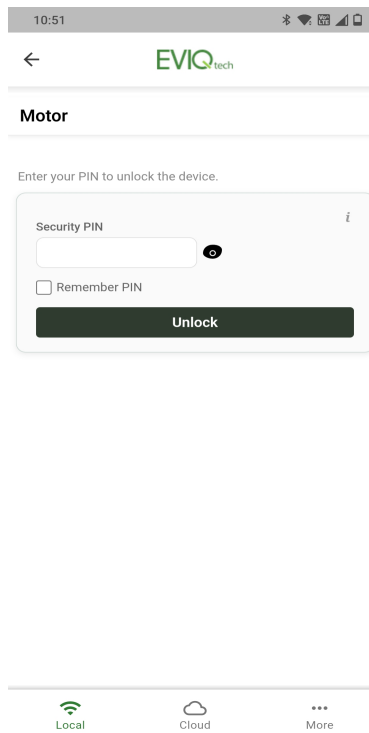


Figure 7.1 — Security PIN entry

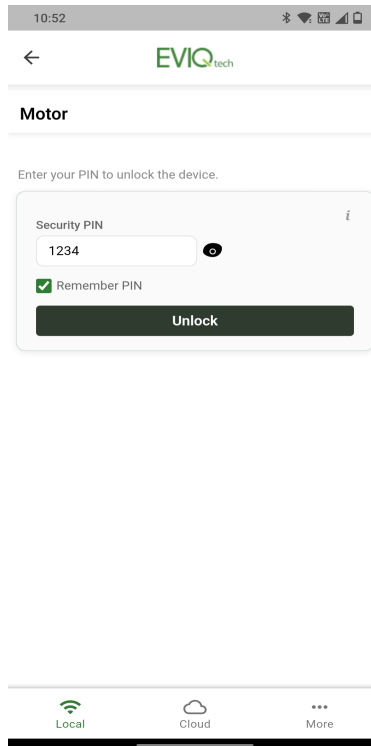


Figure 7.2 — PIN entered, Remember PIN checked

## 7.2 Home Page (House Icon)

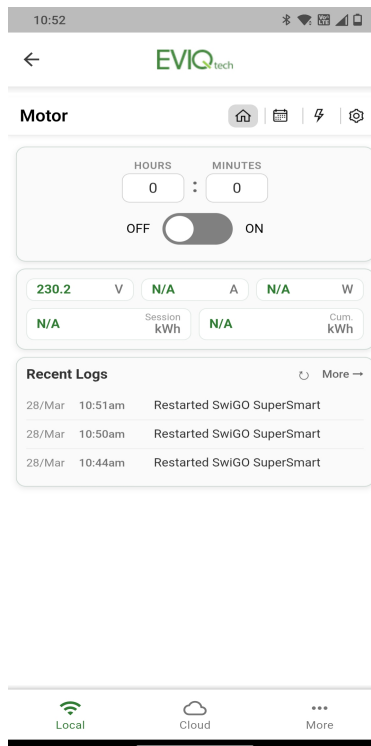


Figure 7.3 — Local Home page

- **Hours : Minutes:** Set custom timer duration
- **OFF / ON toggle:** Main power switch
- **Voltage (V):** Real-time mains voltage (e.g., 230.2V)
- **Current (A):** Real-time current draw
- **Power (W):** Real-time power consumption
- **Session kWh:** Energy for current session
- **Cumulative kWh:** Total lifetime energy
- **Recent Logs:** Timestamped activity log — tap "More" for full history

## 7.3 Navigation Icons

- **Home (house):** Main control panel (default)
- **Schedules (calendar):** Schedule management
- **Protection (lightning):** Protection settings and energy data
- **Settings (gear):** Device configuration

## 7.4 Schedules Page

The Schedules page lets you automate motor operation with flexible time-based control. Tap the Calendar icon in the navigation bar to access it. You can create multiple schedules, each independently enabled or disabled.

### Schedule Configuration Options

- **Schedule Type:** Choose Daily (runs every day) or Weekly (select specific days M/T/W/T/F/S/S)
- **Start Time:** The time (HH:MM) when the motor should turn ON
- **End Time:** The time (HH:MM) when the motor should turn OFF
- **Is Cyclic:** Check this box to enable repeating ON/OFF cycles within the scheduled time window (see below)
- **Enable/Disable toggle:** Green toggle to activate or deactivate a schedule without deleting it
- **+ Add Schedule:** Tap to create a new schedule entry
- **Delete:** Remove a schedule permanently

## Cyclic Scheduling (Detailed)

When "Is Cyclic" is checked, additional ON duration and OFF duration fields appear. Instead of running continuously from Start Time to End Time, the motor will repeatedly cycle ON and OFF within that time window.

**How Cyclic works:** Suppose you set Start Time = 06:00, End Time = 18:00, ON duration = 30 minutes, OFF duration = 15 minutes. The motor will turn ON at 06:00, run for 30 minutes, turn OFF at 06:30, wait 15 minutes, turn ON again at 06:45, run for 30 minutes, turn OFF at 07:15, and so on — repeating this 30-on / 15-off cycle until 18:00.

- **ON Duration (Hours : Minutes):** How long the motor runs in each cycle
- **OFF Duration (Hours : Minutes):** How long the motor pauses between cycles
- **Restart after power resumption:** If checked, the schedule resumes automatically after a power outage

### Tip:

Cyclic scheduling is ideal for irrigation pumps that need intervals (e.g., 30 min on, 15 min off) to prevent motor overheating or allow water levels to recover. It is also useful for aerators, cooling systems, or any equipment that benefits from duty-cycle operation.

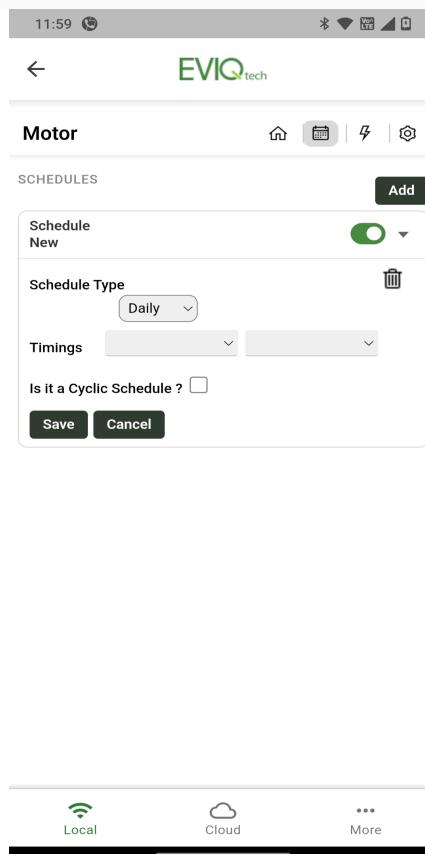


Figure 7.4a — Daily Schedule configuration

The screenshot shows the EVIQtech mobile application interface for configuring a motor schedule. The top status bar shows the time as 11:17 and various connectivity icons. The app header includes a back arrow, the EVIQtech logo, and navigation icons for home, calendar, lightning bolt, and settings. The main title is 'Motor'. Below it, the 'SCHEDULES' section has an 'Add' button. A modal window for editing a schedule is open, showing a toggle switch for 'Schedule Modified', a trash icon for 'Schedule Type', and a dropdown menu set to 'Weekly'. The 'Run Every' section shows a row of day selection buttons: M, T, W, T, F, S, S. Below this are two 'Timings' dropdown menus. The 'Is it a Cyclic Schedule?' checkbox is checked. At the bottom of the modal, there are input fields for 'On Duration' and 'Off Duration', each with '0' in the hour and minute boxes. 'Save' and 'Cancel' buttons are at the very bottom of the modal. The bottom navigation bar has three icons: a Wi-Fi symbol for 'Local', a cloud symbol for 'Cloud', and a three-dot menu for 'More'.

Figure 7.4b — Weekly Cyclic Schedule with ON/OFF duration fields

#### Note:

The Cloud scheduling interface (Section 8.7) is identical in functionality. Schedules configured via Cloud or Local are written directly to the device.

## 7.5 Protection Settings

The Protection page provides comprehensive motor and electrical protection. Tap the Lightning icon in the navigation bar to access it. Each protection type can be independently configured and has an info (i) button for on-screen guidance.

### Dry-Run Protection (Under-Current)

Protects against the motor running without load (e.g., pump running dry when the water source is empty). When the current drawn by the motor falls below the configured lower limit for more than 4 seconds (after a 7-second startup grace period), the device trips and disconnects the motor.

- **Lower Limit (Amps):** Set the minimum current threshold. If the motor draws less than this value, it is considered a dry-run condition. Set this to a value slightly below the normal

running current of your motor.

- **Auto-restart:** When enabled, the device will automatically attempt to restart the motor after a configurable delay (in minutes). This is useful for applications where the water source may refill over time.
- **Protection-only mode:** For pass-through monitoring setups (Circuit 5) where the device monitors current but does not switch the load directly. The device reports the fault but does not disconnect.

## Overload Protection (Over-Current)

Protects against excessive current draw, which can indicate a motor jam, mechanical blockage, bearing failure, or short circuit. When current exceeds the configured upper limit for more than 4 seconds (after a 7-second startup grace period to allow inrush current), the device trips.

- **Upper Limit (Amps):** Set the maximum current threshold. If the motor draws more than this value, it is considered an overload. Set this to a value slightly above the normal running current but below the motor's rated maximum.
- **Auto-restart:** When enabled, the device retries after the configured delay. Use with caution for overload — repeated overloads may indicate a mechanical problem that requires physical inspection.

## Voltage Protection

Protects equipment from dangerous voltage fluctuations that can damage motors and electronics. The device continuously monitors mains voltage and trips within 7 seconds if voltage goes outside the configured safe range.

- **Low Voltage Limit:** Default 150V. Motor trips if mains voltage drops below this value. Low voltage causes motors to draw excessive current, leading to overheating and potential winding damage.
- **High Voltage Limit:** Default 290V. Motor trips if mains voltage exceeds this value. High voltage can cause insulation breakdown and immediate motor damage.
- **Auto-restart (Low V):** When enabled, the device automatically reconnects when voltage returns to normal range, after the configured delay.
- **Auto-restart (High V):** Separate auto-restart setting for high voltage events.

## Additional Protection Settings

- **Restart after power resumption:** When enabled, the motor automatically restarts after a complete power outage (blackout). Useful for unattended installations like farm pumps or sump pumps.

- **Restart delay (Mins):** Wait time after power returns before restarting the motor. This allows the power supply to stabilize and prevents rapid on-off cycling. Recommended: 2–5 minutes.
- **Max run Duration (Mins):** Absolute maximum runtime regardless of other settings. After this duration, the motor is stopped. Acts as a safety backstop to prevent indefinite operation (e.g., if a float switch fails). Set to 0 to disable.

The screenshot shows the 'Motor' settings page in the EVIQtech app. The page is titled 'PROTECTION SETTINGS' and contains several sections:

- Dryrun current:** Lower Limit (0 Amps), Restart required after Dryrun fault? (checkbox), Retry after (Mins), Is this device used for Protection only? (radio buttons: Yes, No), Threshold current (Amps).
- Overload current:** Upper Limit (20 Amps), Restart required after Overload fault? (checkbox), Retry after (Mins).
- Low Voltage Limit:** Lower Limit (150 Volts), Restart required after Low voltage fault? (checkbox), Retry after (Mins).
- High Voltage Limit:** Upper Limit (290 Volts), Restart required after High voltage fault? (checkbox), Retry after (Mins).
- Restart Options:** Restart required after power resumption? (checkbox), Restart delay (Mins).
- Maximum Run Configuration:** Max run Duration (0 Mins).

The bottom navigation bar includes 'Local', 'Cloud', and 'More' options.

Figure 7.5 — Protection Settings: All fields including voltage, restart, max run

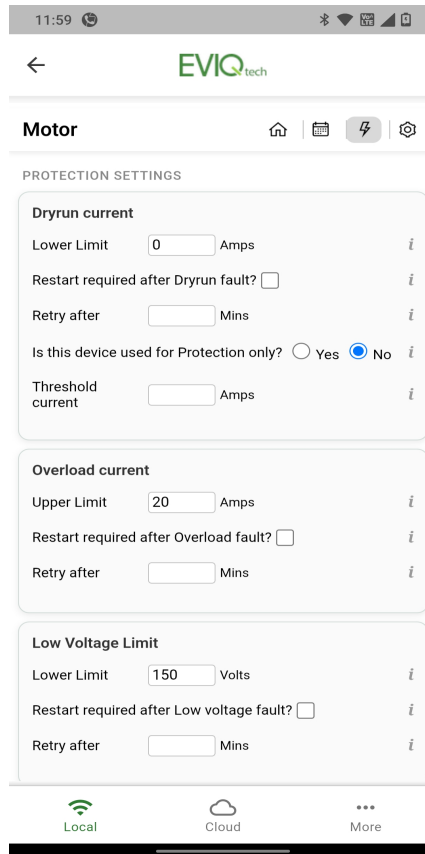


Figure 7.6 — Protection Settings: Dry-run, overload, threshold, protection-only mode

## Fault Detection Timing and Delays

The SwiGO SuperSmart uses specific timing sequences to distinguish genuine faults from normal operating transients:

- **Startup grace period (7 seconds):** When the motor is first switched ON, the SwiGO SuperSmart ignores current readings for 7 seconds. This allows the motor's inrush current (which can be several times the normal running current) to settle down. Both dry-run and overload detection begin only after this 7-second grace period.
- **Fault confirmation (4 seconds):** After the startup grace period, if a dry-run or overload condition is detected, the SwiGO SuperSmart waits for 4 continuous seconds to confirm it is a genuine fault and not a momentary spike or dip. If the current returns to normal within 4 seconds, no trip occurs.
- **Voltage fault timing (7 seconds):** Voltage faults (under-voltage and over-voltage) are detected within 7 seconds. If the voltage exceeds the high limit or falls below the low limit and remains outside the safe range for 7 seconds, the device trips.
- **LED blink duration (6 seconds):** When a fault is detected and the device trips, the fault LEDs blink rapidly for 6 seconds to alert the user. After blinking stops, the LEDs remain in their fault state until the fault is cleared or auto-restart occurs.

- **Retry after (delay timer):** When auto-restart is enabled for any fault type, the 'Retry after' field specifies the delay in minutes before the device attempts to restart. During this delay, the SwiGO SuperSmart waits for the fault condition to clear (e.g., water returns, voltage stabilizes). If the fault persists after restart, the device will trip again and wait for another retry cycle. This continues within the scheduled time period only — if the retry time falls outside the scheduled window, the SwiGO SuperSmart will not restart.

**Note:**

Tap the (i) icon next to each setting in the app for built-in contextual help text.

## 7.6 Settings Page (Gear Icon)

The Settings page provides access to all device configuration options. Tap the Gear icon in the navigation bar.

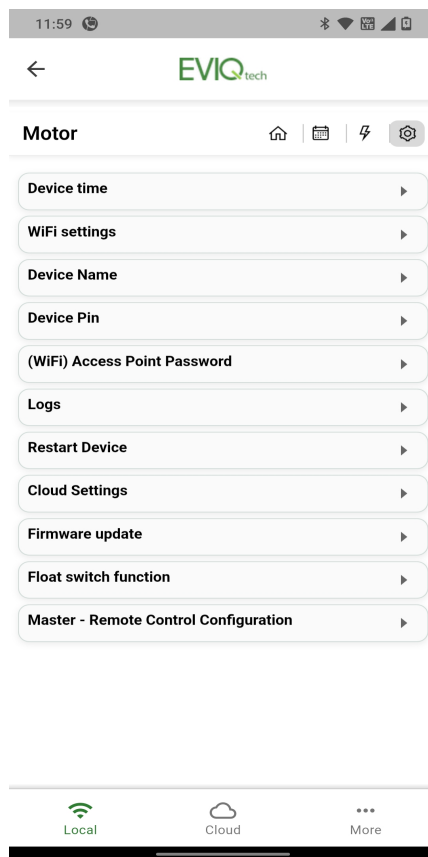


Figure 7.8 — Settings Page: Main menu overview

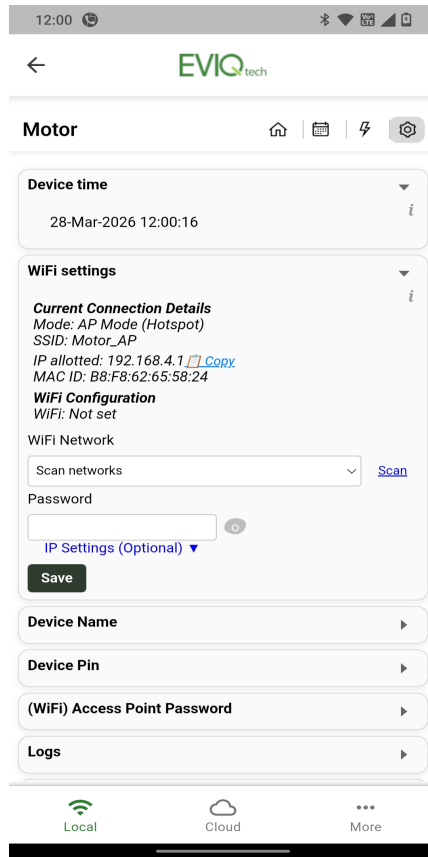


Figure 7.9 — Settings: WiFi configuration, Device Time, IP settings

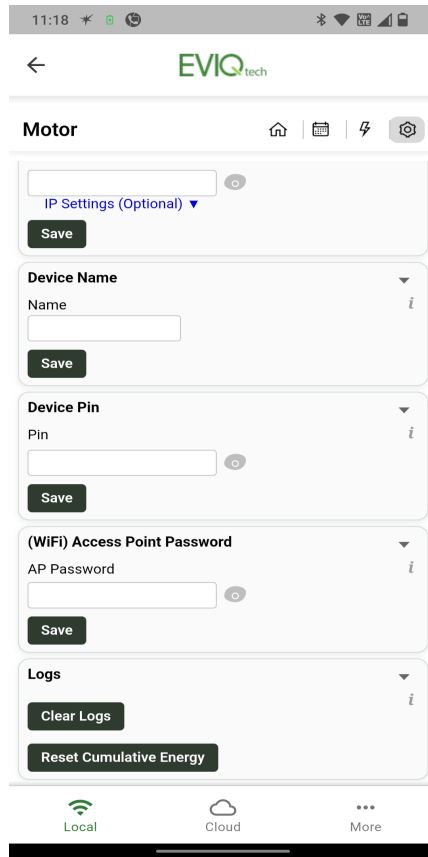


Figure 7.10 — Settings: Device Name, PIN, AP Password, Logs

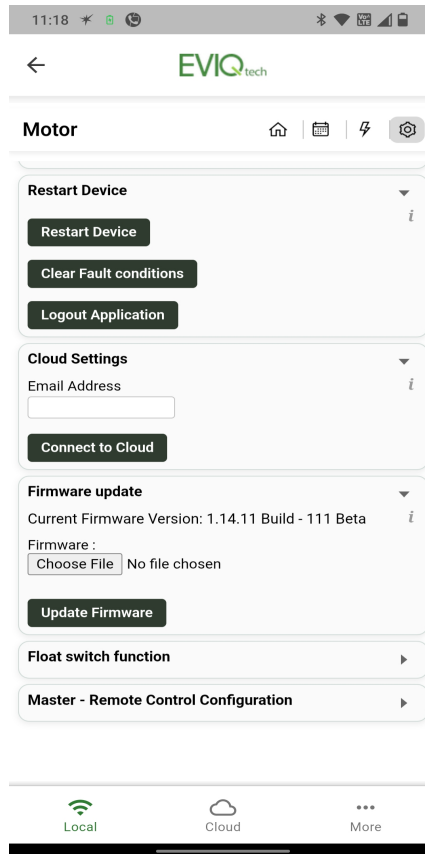


Figure 7.11 — Settings: Cloud, Firmware update, Float Switch, Master-Remote

- **Device time:** View the current device clock and sync it with your phone.
- **WiFi settings:** View current connection details (Mode, SSID, IP, MAC). Change WiFi network, scan for available networks, set a static IP address.
- **Device Name:** Rename the device (e.g., Motor, Pump). After renaming, you must reconnect to the new AP name.
- **Device Pin:** Change the 4-digit security PIN.
- **AP Password:** Change the password for the device's own WiFi Access Point broadcast.
- **Logs:** View recent activity logs. Clear Logs to reset history. Reset Cumulative Energy to zero the kWh meter.
- **Restart Device:** Restart Device (soft reboot). Clear Fault Conditions (override a fault trip without waiting for the retry timer — also overrides Manual Stop during a scheduled run). Logout Application.
- **Cloud Settings:** Enter or change the cloud email address and connect/disconnect from EVIQtech Cloud.
- **Firmware update:** Shows current firmware version (e.g., 1.14.11 Build 111 Beta). Upload and apply OTA firmware updates received via email.
- **Float switch function:** Configure float/flow switch modes (see Section 7.7 below).

- **Master–Remote Control:** Configure master/remote device relationships (see Section 7.8 below).

**Tip:**

Use 'Clear Fault Conditions' under Restart Device if a schedule is disrupted by a fault and you do not want to wait for the retry delay. This button also overrides a Manual Stop during a scheduled

## 7.7 Float Switch & Flow Switch Settings (in Settings Page)

The SwiGO SuperSmart includes a 5V DC output for connecting a float switch or flow switch. This feature is configured at the bottom of the **Settings** page under **Float switch**. It enables automatic pump control based on water level conditions.

### Understanding Float Switches (2-Wire and 3-Wire)

The SwiGO SuperSmart can work with **both 2-wire and 3-wire float switches**. Choose the right type based on the mode you need:

- **2-Wire Float Switch:** Has a single NO (Normally Open) or NC (Normally Closed) contact. Suitable when you need only one detection mode — either Tank Full or Tank Empty. Connect the two wires directly to the SwiGO SuperSmart's 5V DC terminals (Red and Black wires).
- **3-Wire Float Switch:** Has a common wire shared between two internal contacts (NO and NC). Supports both Tank Full and Tank Empty detection depending on which wire pair you connect. A standard 3-wire float switch gives you the flexibility to choose the mode by selecting the appropriate pair of wires.

For a **3-wire float switch**, depending on which pair of wires you connect to the SwiGO SuperSmart's 5V DC terminals, you get different detection behavior:

- **Wire Pair A (Tank Empty detection):** Connect the two wires that have continuity (circuit closed) when the float is hanging down, i.e., when the tank is empty. When the tank fills and the float rises, this pair opens the circuit.
- **Wire Pair B (Tank Full detection):** Connect the two wires that have continuity (circuit closed) when the float rises up, i.e., when the tank is full. When the tank is empty and the float hangs down, this pair has no continuity.

**Tip:**

For a 3-wire float switch: to identify which wire pair to use, disconnect the float switch, hold it so the float hangs down (simulating empty tank), and use a multimeter to check continuity between each pair of wires. The pair that shows continuity with the float hanging down is Wire Pair A (Tank Empty). The pair that shows continuity with the float raised up is Wire Pair B (Tank Full). For a 2-wire float switch: simply connect both wires to the 5V DC terminals and select the appropriate mode.

**Mode: No (Default)**

Float switch functionality is disabled. The device operates on timer and manual control only. Select this mode if you do not have a float switch or flow switch connected.

This is the factory default setting. The 5V DC output on the float switch terminals remains inactive in this mode.

**Mode: Tank Full Detection (NO Contact)**

Use this mode to **automatically stop the pump when the tank is full**. Connect **Wire Pair B** (the pair that has continuity when the float rises / tank full) to the SwiGO SuperSmart's 5V DC terminals (Red and Black wires).

**How it works:** When the tank is empty, the float hangs down and Wire Pair B is open (no continuity). The pump can run normally via timer, schedule, or manual control. As the tank fills and the float rises, Wire Pair B closes (continuity). The SwiGO SuperSmart detects this closed circuit and immediately stops the pump.

- **Wire pair to use:** Pair B — continuity when float is UP (tank full)
- **Pump stops when:** Float rises (tank full) — circuit closes
- **Pump starts:** Via timer, schedule, or manual ON only
- **Use case:** Overhead tank filling — pump runs until tank is full, then stops automatically

**Note:**

The float switch works alongside the timer. Whichever triggers first (timer expiry or tank full) will

**Mode: Tank Empty Detection (NO Contact)**

Use this mode to **detect when the tank is empty and control the pump accordingly**. Connect **Wire Pair A** (the pair that has continuity when the float hangs down / tank empty) to the SwiGO SuperSmart's 5V DC terminals (Red and Black wires).

**How it works:** When the tank is empty, the float hangs down and Wire Pair A is closed (continuity). The SwiGO SuperSmart detects this and can start the pump. As water fills the tank and the float rises, Wire Pair A opens (no continuity). The SwiGO SuperSmart detects the open circuit and stops the pump. When water is consumed and the level drops, the float hangs down again, closing the circuit, and the pump can restart automatically.

- **Wire pair to use:** Pair A — continuity when float is DOWN (tank empty)
- **Pump runs when:** Float hangs down (tank empty) — circuit closed
- **Pump stops when:** Float rises (tank full) — circuit opens
- **Auto-restart:** Yes — pump restarts when float drops again (tank empties)
- **Use case:** Fully automatic tank fill-and-stop cycle with no scheduling needed

## Flow Switch Mode

A flow switch (paddle-type) can be connected to detect water flow in the pipe. When water flows, the switch remains closed and the pump runs. When flow stops (e.g., pipe blockage, dry pipe), the switch opens and the pump stops. This provides flow-based dry-run protection.

- **Switch type:** Paddle or flow switch — closed when water flows, open when no flow
- **Use case:** Dry-run protection based on actual water flow rather than current sensing

### Note:

Flow switch mode uses the NO Contact setting. The flow switch does not have an NC (Normally

## Delay Settings

When a float/flow switch mode is selected, two delay fields appear:

- **Flow Detection Delay (seconds):** How long the SwiGO SuperSmart waits after detecting a switch state change before acting. Default: 10 seconds. Prevents false triggers from water sloshing or momentary float bouncing.
- **Flow Stop Delay (seconds):** How long after the switch opens before the pump is stopped. Default: 10 seconds. Provides a buffer to confirm the condition is genuine.

A safety confirmation checkbox — “220V is not connected to float switch” — must be acknowledged before saving.

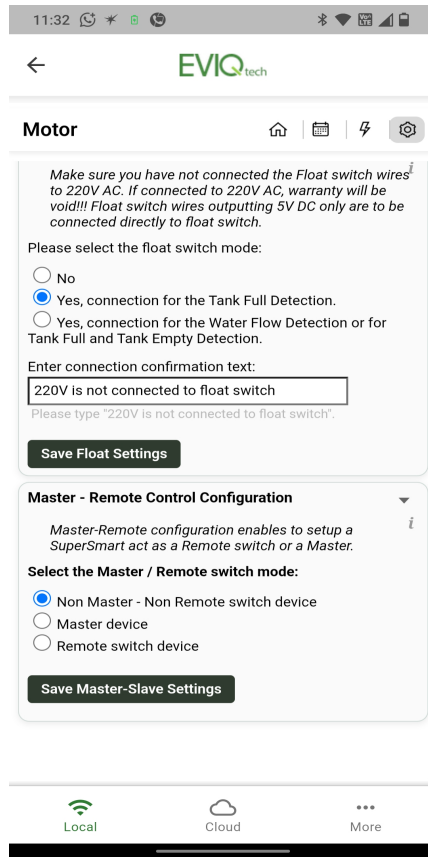


Figure 7.12 — Float Switch: Tank Full Detection with delay settings

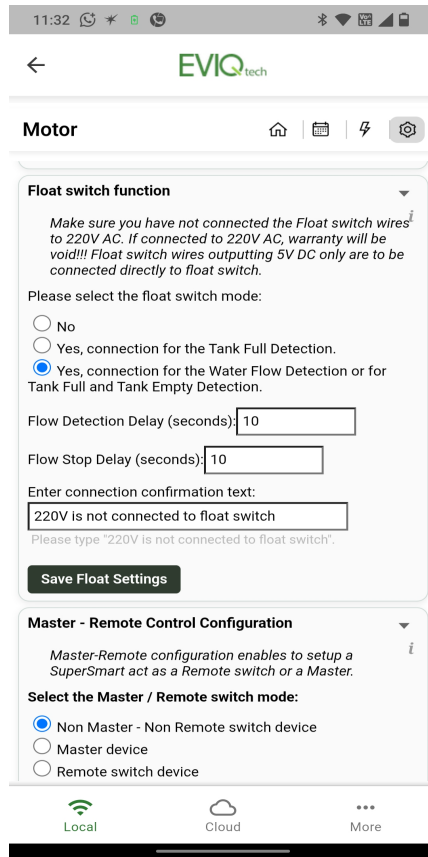


Figure 7.13 — Float Switch: Flow/Tank Full+Empty Detection mode

## Wiring Summary

Mode	Wire Pair / Type	Float Position for Continuity	Pump Action
Tank Full Detection	3-wire: Pair B 2-wire: NO type	Float UP (tank full)	Stops pump when full
Tank Empty Detection	3-wire: Pair A 2-wire: NC type	Float DOWN (tank empty)	Runs pump when empty, stops when full
Flow Switch	2-wire device	N/A — flow-based	Stops pump when no flow

**WARNING:**

Never connect the 5V DC float switch wires to 220V AC mains! Doing so will damage the device

## 7.8 Master–Remote Control Configuration

The Master-Remote feature allows multiple SwiGO SuperSmart devices to work together. One device acts as the **Master** and controls one or more **Remote** devices. When the Master switches ON or OFF, it sends a command to all linked Remote devices to do the same.

Three modes are available:

- **Non Master – Non Remote switch device (Default):** The device operates independently with no master-remote relationship.
- **Master device:** This device becomes the master. When it switches ON or OFF (via timer, schedule, or manual), all linked remote devices follow.
- **Remote switch device:** This device becomes a remote. It receives ON/OFF commands from its paired master device and follows them.

## Remote Switching Method

When Master or Remote mode is selected, choose the communication method:

- **MQTT Service:** Uses the cloud (MQTT protocol) to relay commands between master and remote devices. Works over the internet — devices can be on different WiFi networks or locations.
- **Local WiFi:** Commands are sent directly over the local WiFi network. Both master and remote devices must be on the same WiFi network. Lower latency, no internet required.

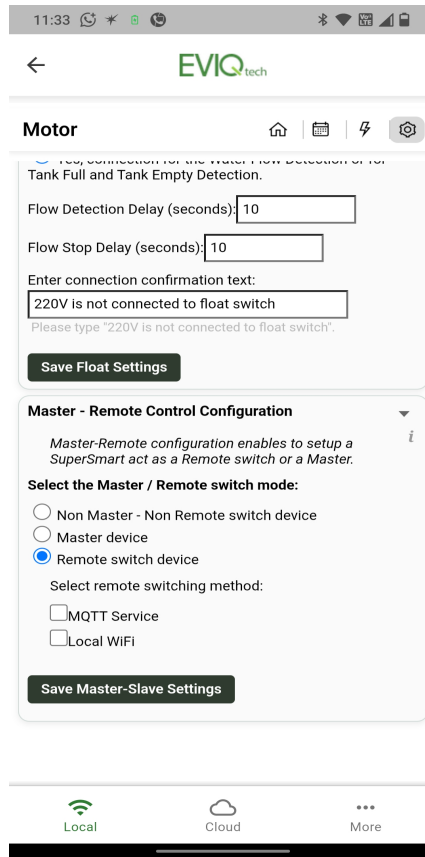


Figure 7.14 — Master device selected with MQTT and Local WiFi options

**Tip:**

Use Master-Remote when you need one switch to control multiple pumps, or when a single timer/schedule should operate equipment across different circuits (e.g., pump house and kitchen

## 8. Cloud Dashboard

The EVIQtech Cloud (powered by ThingsBoard v4.1.0) provides remote monitoring and control from anywhere.

### 8.1 Logging into the Cloud

**For new users:** If you are connecting to the EVIQtech Cloud for the first time, you must first create a username and password. Tap the “Create Account” or “Register” option on the Cloud login screen, enter your email and set a password. Once registered, use these credentials to log in.

**For existing users:** Enter your registered email and password, or scan a QR code to log in.

**Step 1:** Tap the "Cloud" tab at the bottom of the app.

**Step 2:** New users: tap Register / Create Account, enter email, set password, and confirm.

**Step 3:** Existing users: enter your email and password, or scan a QR code.

**Note:**

The QR code login option allows quick access by scanning a QR code provided by your cloud administrator or generated from the ThingsBoard dashboard. This is useful for shared or

**Note:**

Note: In the screenshots below, the email and password fields are shown for illustration only. In production use, your credentials should be kept private and not shared.

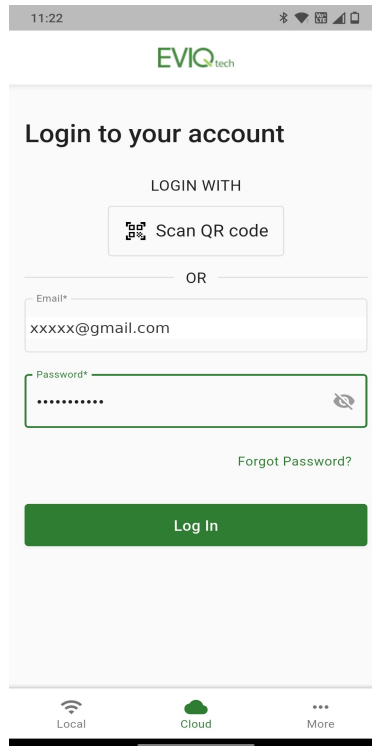


Figure 8.1 — Cloud login: Email + Password or QR code

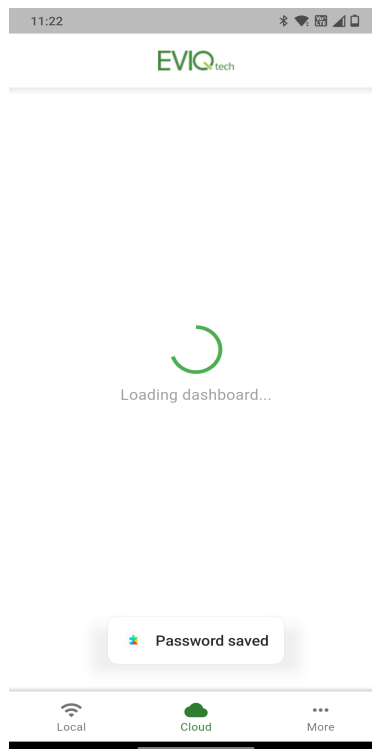


Figure 8.2 — Loading with Password saved

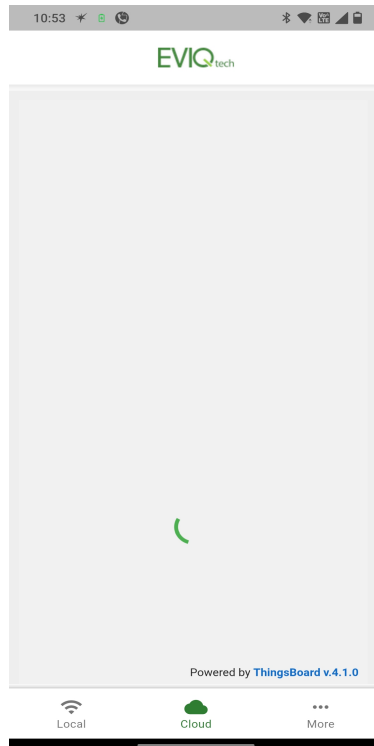


Figure 8.3 — Powered by ThingsBoard v4.1.0

## 8.2 Multi-Device Overview

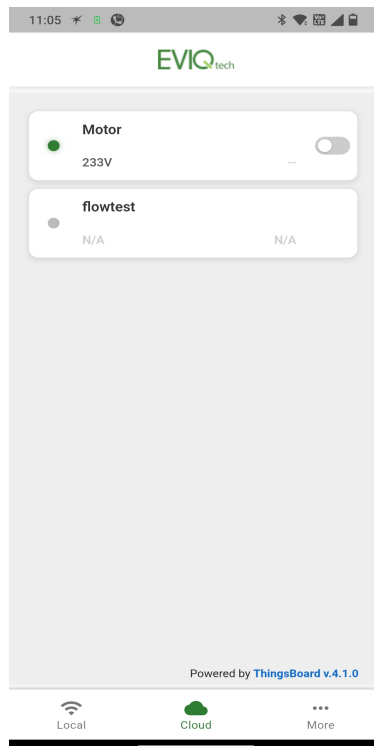


Figure 8.4 — Motor (online, 233V) and flowtest (offline)

- **Green dot:** Online and cloud-connected
- **Grey dot:** Offline or unreachable
- **Quick toggle:** ON/OFF directly from the list

## 8.3 Cloud Home — Remote Control

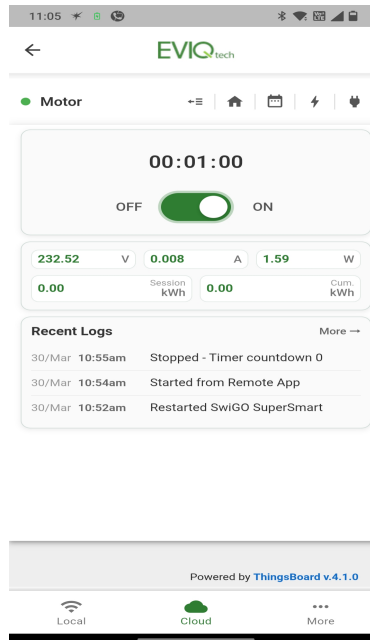


Figure 8.5 — Cloud Home: timer, live readings, logs

- **Countdown Timer:** Shows remaining time during timed operation
- **OFF/ON Toggle:** Remote switch from anywhere
- **Live Readings:** 232.52V, 0.008A, 1.59W
- **Logs:** "Started from Remote App" for remote actions

### Note:

Remote operations are logged as 'Started from Remote App' to distinguish from local or physical

## 8.4 Navigation Icons

- **Settings/Filter:** Cloud device config
- **Home:** Remote control panel
- **Calendar:** Cloud scheduling

- **Lightning:** Analytics and energy
- **Plug:** Protection status

## 8.5 Voltage-Current Analytics

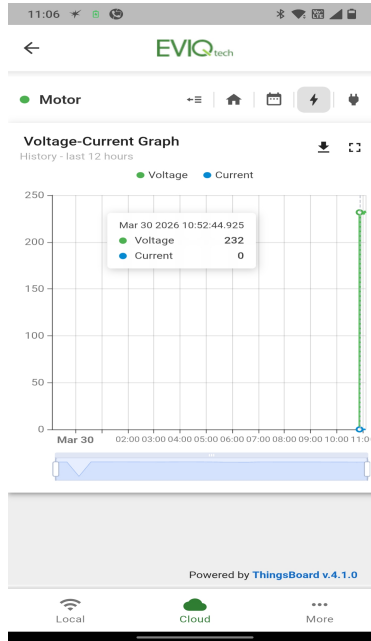


Figure 8.6 — Voltage-Current Graph (last 12 hours)

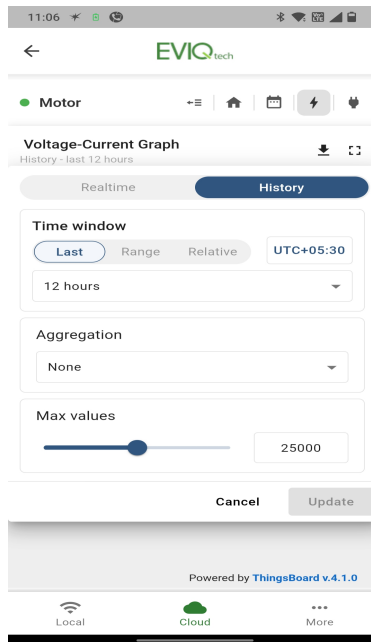


Figure 8.7 — Time window settings

- **Realtime / History:** Toggle between live and historical data

- **Time window:** Last, Range, or Relative
- **Aggregation:** None, Average, Min, Max
- **Max values:** Default 25,000 data points

## 8.6 Energy Chart

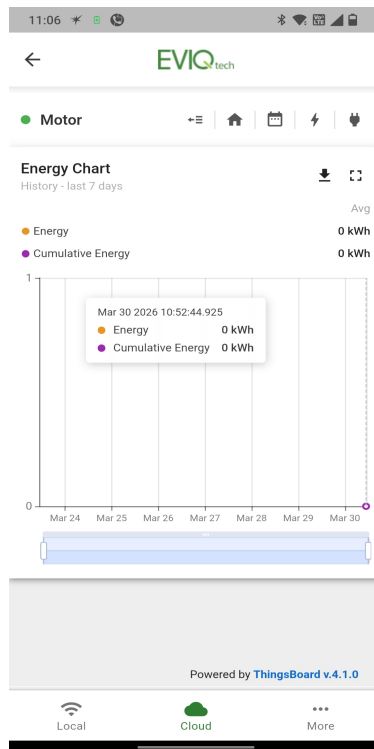


Figure 8.8 — Energy Chart: last 7 days

## 8.7 Cloud Scheduling

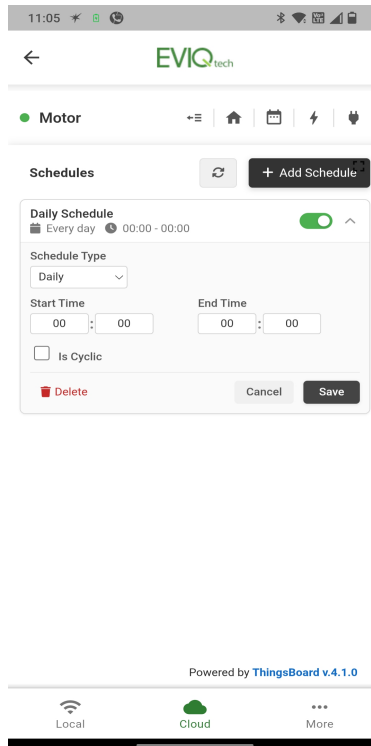


Figure 8.9 — Cloud Schedules with cyclic option

#### Note:

Scheduling in Cloud mode and Local mode are functionally identical. All schedules are written directly to the device and read back from the device. Any schedule you create or modify via the Cloud dashboard is stored on the device itself, and vice versa.

- **+ Add Schedule:** Create new schedule
- **Type:** Daily or other schedule type
- **Start/End Time:** Operating window for the schedule
- **Is Cyclic:** Enable repeating on/off cycles within the time window (see Section 7.4 for detailed explanation)
- **Enable/Disable:** Toggle schedule on or off without deleting

## 9. Browser Access (iOS & Other Devices)

The EVIQtech app is currently available for **Android only**. However, the SwiGO SuperSmart has a built-in web interface that can be accessed from **any device with a web browser** — including iPhones, iPads, laptops, and desktop computers. No app installation is required.

### Note:

An iOS app is under development. Until it is released, iOS and iPhone users can use the browser method described below for full local access.

### 9.1 Access via Local AP Mode (No Router Needed)

When the SwiGO SuperSmart is in AP mode (Access Point mode), it creates its own WiFi network. You can connect to it from any device and access the control interface through a web browser.

**Step 1:** Power on the SwiGO SuperSmart. If it is not connected to any WiFi network, it will automatically create its own AP within ~60 seconds.

**Step 2:** On your iPhone, iPad, laptop, or any device, go to **WiFi Settings** and connect to the network named **SwiGOss\_AP** (or DeviceName\_AP if you have already renamed the device).

**Step 3:** Open any web browser (Safari, Chrome, Firefox, etc.).

**Step 4:** In the address bar, type: **http://192.168.4.1** and press Enter.

**Step 5:** The SwiGO SuperSmart local web interface will load. Enter your PIN (default: 1234) to unlock.

**Step 6:** You now have full access to the device dashboard, schedules, protection settings, float switch settings, and all other controls — identical to the Android app interface.

### Tip:

Bookmark <http://192.168.4.1> in your browser for quick access next time. The session times out

### 9.2 Access via Local WiFi Mode (Same Network)

Once the SwiGO SuperSmart is connected to your home or office WiFi router (configured via AP mode or BLE pairing), you can access it from any device on the same network using a browser.

**Step 1:** Ensure your iPhone, iPad, laptop, or other device is connected to the **same WiFi network** as the SwiGO SuperSmart.

**Step 2:** Open any web browser.

**Step 3:** In the address bar, type the device's address. You can use either:

- **mDNS name:** http://DeviceName.local (e.g., http://Motor.local)
- **IP address:** http://[IP assigned by router] (e.g., http://192.168.0.120) — check your router's DHCP client list if needed

**Step 4:** The local web interface loads. Enter your PIN to unlock and control the device.

**Note:**

The mDNS name (DeviceName.local) works on most modern devices including iPhones, iPads, Macs, and Windows 10/11. If it does not resolve, use the IP address instead.

## 9.3 What You Can Do via Browser

The browser interface provides the same functionality as the Android app's Local mode:

- View real-time power monitoring (voltage, current, power, energy)
- Turn the load ON/OFF manually
- Set and manage timer duration
- Configure schedules (daily and cyclic)
- Adjust protection settings (dry-run, overload, voltage limits)
- Configure float switch and flow switch modes
- Set up Master-Remote control
- Change device name, PIN, and WiFi settings

**Note:**

Cloud features (remote access from outside the local network) require the Android app or the EVIQtech Cloud dashboard at [cloud.eviqtech.com](http://cloud.eviqtech.com).

# 10. Troubleshooting

## 10.1 Device Not Found During BLE Scan

- Ensure BLE mode is active: Hold Green + Yellow buttons 5s until blue LED blinks
- Bluetooth enabled on phone
- Move closer to device (within 5 meters)
- Location permission granted to the app
- Restart device and retry

## 10.2 WiFi Connection Fails

- Double-check WiFi password
- Confirm 2.4 GHz network (5 GHz not supported)
- Router online and in range
- Restart router and device

## 10.3 Cloud Connection Not Working

- Verify cloud email is correct
- Internet connection active
- Device connected to WiFi first (check Local tab)
- Log out and back in on Cloud tab
- Force-close and reopen app if stuck on Loading

## 10.4 Device Offline in Cloud

- Device powered on and WiFi connected locally
- Internet connection working
- Update WiFi via Settings if network changed
- Restart or power-cycle the device

## 10.5 Returning to AP Mode

If WiFi unavailable, device auto-returns to AP mode in ~15 seconds. Manual reset:

- Hold Violet + Red buttons 10 seconds until blue LED lights up

## 10.6 Factory Reset

- Hold Yellow + Blue + Red buttons 20 seconds until blue LED lights

**Important:**

Factory reset erases everything: WiFi, name, PIN, cloud, protection, schedules. Full re-setup

## 10.7 PIN Forgotten

- Requires factory reset (10.6), then re-pair via BLE (Section 6) or AP (Section 4)

# 11. Support and Contact

For technical support, warranty inquiries, or feedback:

Contact	Details
Website	<a href="http://www.eviqtech.com">www.eviqtech.com</a>
Email	<a href="mailto:info@eviqtech.com">info@eviqtech.com</a>
App	Via the "More" tab in the EVIQtech app

---

**Thank you for choosing EVIQtech!**

© 2026 EVIQtech. All rights reserved.