EGUANA

Commissioning Guide
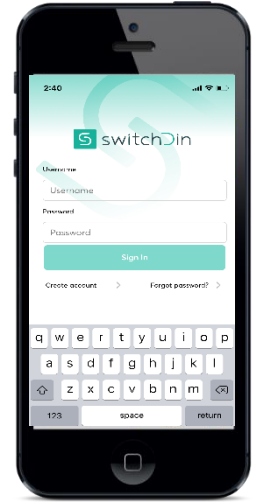
Table of Contents

Contents

1 Introduction

This manual covers the commissioning procedure of Eguana Evolve battery energy storage systems (BESS). Refer to the Installation and Startup manual of the applicable BESS model to energize the system before commencing the commissioning procedure. When energized, the BESS will remain in a sleep/standby mode until the Droplet has been activated and commissioned.

1.1 Before you begin

Commissioning the BESS requires the following:
1. Live internet connection.
2. The user is registered with Eguana Technologies Pty Ltd as a certified installer and has received via email the initial login credentials for the commissioning application from either the manufacturer, or from the certified installer account administrator.
3. **Applicable to regions other than Australia – Region A:**
   A Windows PC with the Eguana ECI application software installed is required to change the regional settings of the PCS within the battery system. Contact Eguana Technologies technical support to obtain the software and instruction manual.

1.2 Stormcloud by SwitchDin application

1. Download the **Stormcloud by SwitchDin** app (available in IOS & Android), or access the monitoring system via web-browser @ https://pwa.switchdin.com/account/login

2. Login to your account using the credentials provided to you by the manufacturer, or by your company account administrator.

1.3 App Navigation

The Home menu is the default menu at login, and displays the most recently viewed Portfolios and Units.

Select ≡ at the top-left of the screen to navigate the menus.

1.4 About Portfolio / Unit / Droplet / Devices

Portfolio: A list of units that can be monitored under a single dashboard. An installation company can assign all units to a single portfolio, or choose to create multiple portfolios to manage the distribution of units, for example, by territory / region, sub-contractor, etc.

Unit: A unit encompasses all Droplet connected devices that create a functional solar + storage system.

Droplet: The Droplet is the internet gateway and energy management system (EMS) for the solar + storage system. Devices are detected and configured by the Droplet. It is included inside the PCS cabinet of the Evolve system.

Devices: Devices include the main components of the solar + storage system. They include the BESS, PV inverter, and energy meter(s).

2 Commissioning Procedure

Note: The step-by-step instructions below are notated as shown:
        Menu >> Instruction **COMMAND BUTTON**

2.1 Assign Droplet / Create or Select Portfolio / Connect Droplet to Network

≡   **Installer >> Endpoint configuration**

1. Installer >> Select **I HAVE A DROPLET TO INSTALL**
2. Barcode >> **Scan** Droplet QR code or select **MANUALLY ENTER CODE**

Manual option (ignore if QR code scanned):

Droplet Serial Number >> Enter the Droplet serial number. Select **CONFIRM**

3. Create NEW or Choose a Portfolio >> Select a Portfolio from the available list and skip to step 5, or
        Select **[+]** to create a new Portfolio, enter the name/address, then select the Portfolio in the list.
        Select **CREATE NEW PORTFOLIO**
4. Create New Unit >> Enter the name and address of the new Unit, then select the unit from the list.
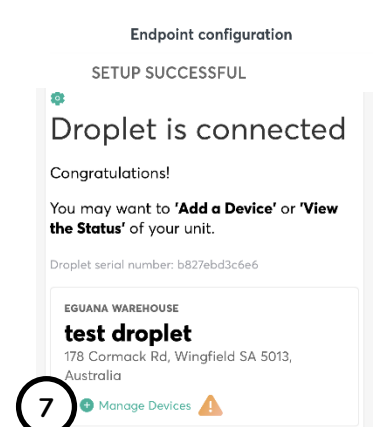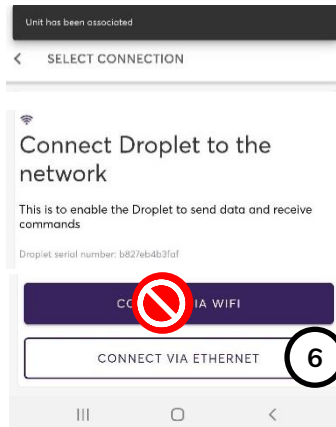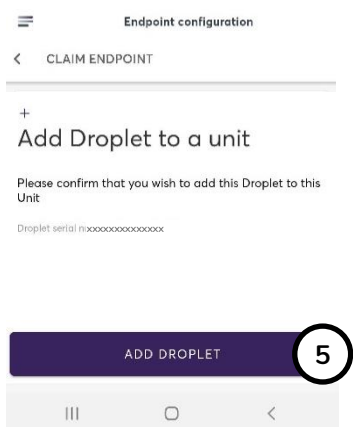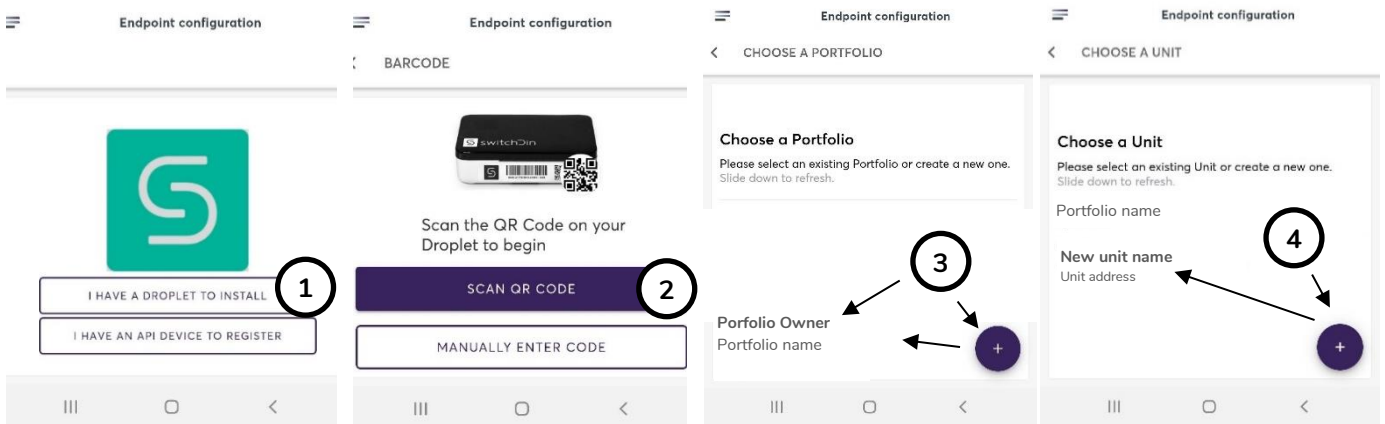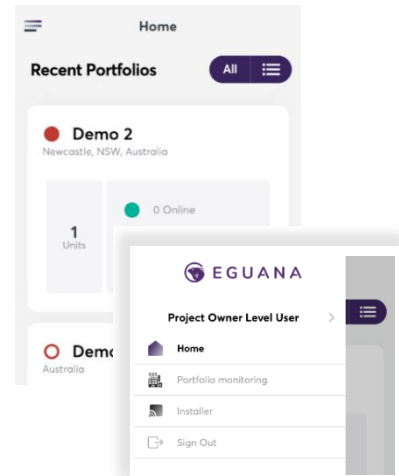5. Claim endpoint >> Add (assign) a Droplet to a Unit. Select **ADD DROPLET**
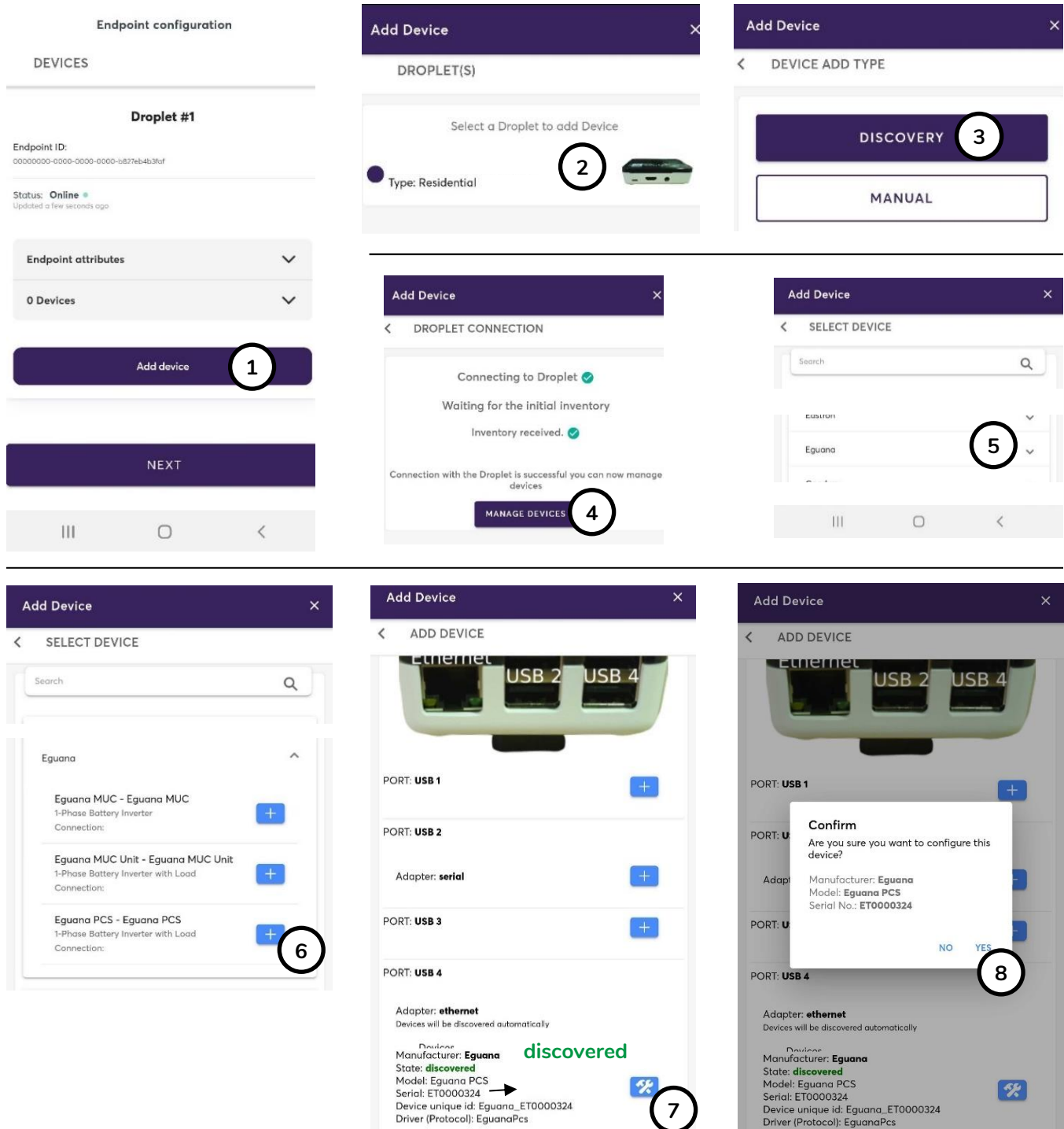6. Select Connection >> Select **CONNECT VIA ETHERNET**

NOTE: WIFI is not supported – do not select this option.

7. A successful internet connection will proceed to the device management procedure.
        Select **[+] Manage Devices.**   Proceed to section 2.2.

2.2 Manage Devices
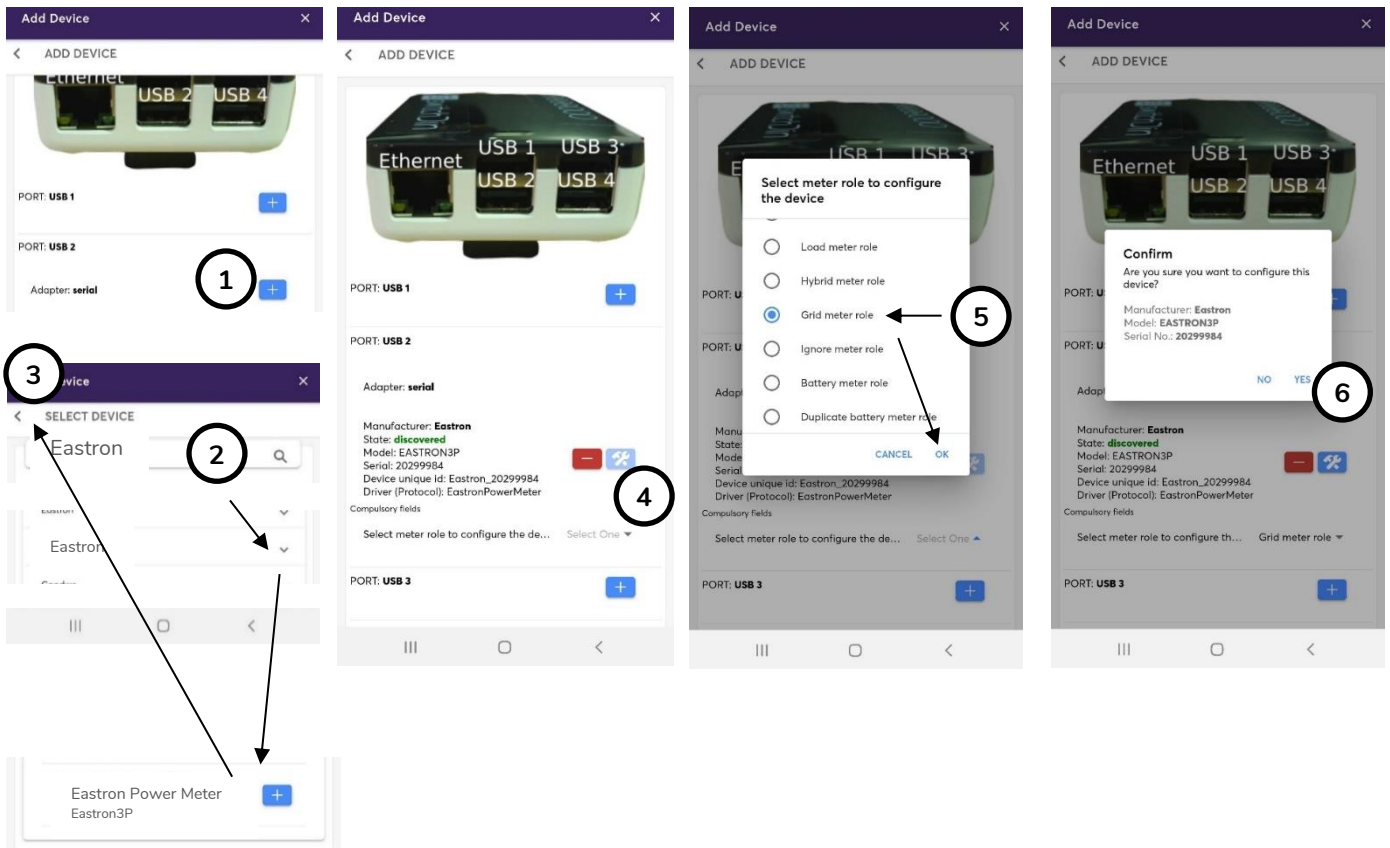

2.2.1 Eguana PCS configuration

Follow steps 1 thru 4 above to auto-discover the PCS, then skip to step 7.
Note: Ignore steps 5-6 for Evolve ESS and Evolve LFP in Australia.

7. The device state will indicate **discovered.** Select [icon] to configure the device.
8. Select **YES** to confirm, then **OK** to proceed. The device state will indicate **configured.**
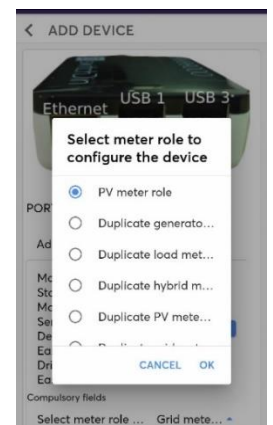
2.2.2 Energy meter – Grid meter role

1. Select **[+]** next to USB Port 2.
2. Search for the "Eastron Power Meter – EASTRON3P", then select **[+].**
3. **IMPORTANT! Do not close the window using the [x] button in the top-right menu bar.** This will cancel the commissioning process. Instead,
   Select **[<]** to return to the previous menu (USB Port list).
   ** Note: the **[<]** button is at the top-left corner of the app.

4. The device state will indicate **discovered.** Select 🛠 to configure the device.

5. Select **Grid meter role,** then **OK** to proceed.
6. Select **YES** to confirm, then **OK** to proceed. The device state will indicate **configured.**

2.2.3 Energy meter – PV meter role (where applicable)

For systems that require monitoring of the PV output with a dedicated energy meter (refer to the Installation & Startup Manual for more details), repeat the procedure in section 2.2.2 above by **selecting the USB port that is connected to the PV meter.**

In step 5, select **PV meter role** (shown right).

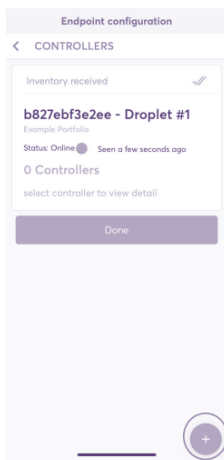## 2.3 Droplet direct PV integration for AC coupled solar + storage solutions

The Stormcloud by SwitchDin app allows for direct integration from the Droplet to a select list of PV inverter manufacturers. This integration allows the Droplet to operate the Evolve energy storage system as part of a complete solar + storage solution without a dedicated PV energy meter.

Refer to the [support](#) section of SwitchDin's website for the latest Quick Reference Guides for each PV inverter manufacturer. Alternately, consult the PV inverter manufacturer for the latest Swtichdin integration instructions.
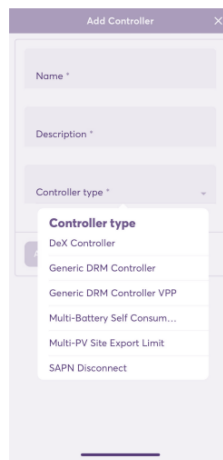
2.4 Add Controllers

Refer to the sample screenshots below to add controllers that are required in specific market applications.

Add a controller

Provide info and choose controller

Controller definitions

DeX - required for Simply Energy South Australian VPP customers.

Generic DRM - Software based DRM controller

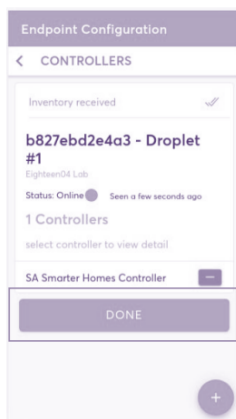**Generic DRM VPP** - Software based DRM controller to be used in SwitchDin VPP

Multi-PV Site Export Limit - Export limit algorithm for multiple PV inverters

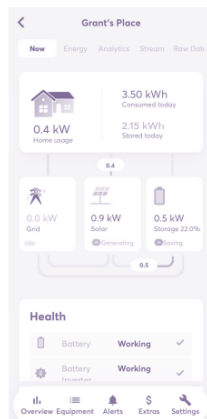**SAPN Disconnect** - South Australian remote disconnection controller.

3 Check EMS Communication

Refer to the sample screenshots below to check if the Droplet is communicating with the system devices.

Finish procedure

Check to see if device data is available

You can also check a 10 second stream of parameters