

## Smart and simple solar and batteries

# **StormCloud**<sup>TM</sup>

## Distributed data and control platform



StormCloud™ integration and control made simple

#### **Functions**

Cloud-based distributed computing platform to provide scalable and secure data collection, analytics and orchestration of rooftop solar, battery storage and controllable loads with end-user and fleet manager web portals.

### Features & Benefits

- Solar and battery hardware agnostic monitoring and control. Avoid duplication or single supplier lock-in.
- Real-time information at 1min intervals on energy flows for your entire rooftop solar, battery storage and demand management portfolio.
- Cloud-based data and control platform with access from any web or mobile device
- Management of fleet-wide operation for demand response management, energy trading or ancillary services
- In-depth analytics on historical, real-time, and predictive basis with reporting and data export capability
- Data reported and stored with better than Class 1 accuracy
- Facilitates fault diagnosis and remote reset to minimise O&M costs
- Remote inverter configuration support to minimise Installation and commissioning costs
- · Customisable alerts and alarms

### **Data Integrations**

- Connects to SwitchDin Droplets<sup>™</sup> to gather realtime data including AC, DC, temperature and other measurements, device status and alerts.
- Integrate across APIs of other cloud services and utility systems.
- Cloud API, IEC61850, AS4755 support for utility integration. DNP3, IEEE2030.5 support (2018)

## **Data Management and Analytics**

- Accepts diverse, multi-structured data in a streaming database built for real-time supervisory control
- Meaningful graphs, analysis-based alerts, and detailed reporting.
- Data export and archiving support.

#### Web Portals

- We provide a consistent engagement with end-users and fleet managers regardless of the solar or battery vendor or technology deployed
- Simple elegant display of measurements and status of solar, grid and battery assets for individual sites or across the fleet.
- Our white label version enables customer branding to ensure a consistent user experience and improved customer engagement.
- Fleets of systems can be aggregated for analysis and control through one portal, thereby enabling new insights and value.

## Control and Device Management

- Supervisory and distributed control via SwitchDin's local Droplet™ controller.
- Advanced predictive algorithms and machine learning to provide optimised fleet performance of solar and battery systems.
- Facilitates aggregation and orchestration for demand response management, energy trading, or ancillary services
- Simplifies system operation around core mission goals e.g. optimise ROI, minimise CO2 emissions, or maximise self-sufficiency.
- Simplified deployment and provisioning of Droplets
- Add "smart" capabilities to "dumb" inverters

#### Infrastructure Requirements

- Hardware agnostic cloud platform can deploy on our private cloud or locally on your own servers.
- Industry standard security and best-in-class performance.



Historical, real-time and predicted