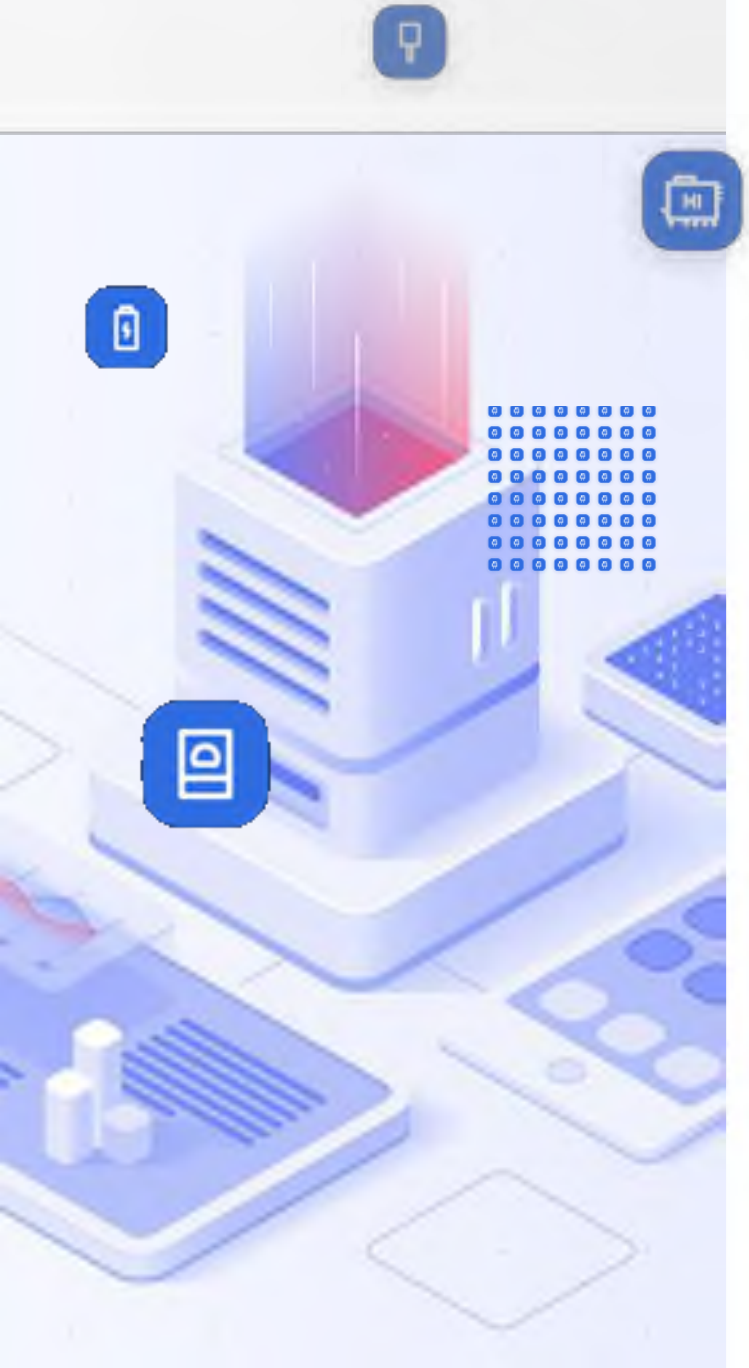
Energy Management Solution by VOLTHA

Powered by DEYE Copilot

Contents



01

Introduction

1.1 What is it

1.2 Why use it

What is it

The Voltha Energy Management System integrates renewable energy, power grids, and energy markets data to optimize your energy usage and cost savings.

Energy Integration

Efficiency Optimization

Cost Saving

Why use it

Cost Saving

Minimize energy waste and reduce unnecessary energy expenses by adapting to fluctuating electricity prices and external temperatures

Hassle - Free

Simplify electricity consumption management by automatically adjusting to your preferences without sacrificing comfort

Sustainable

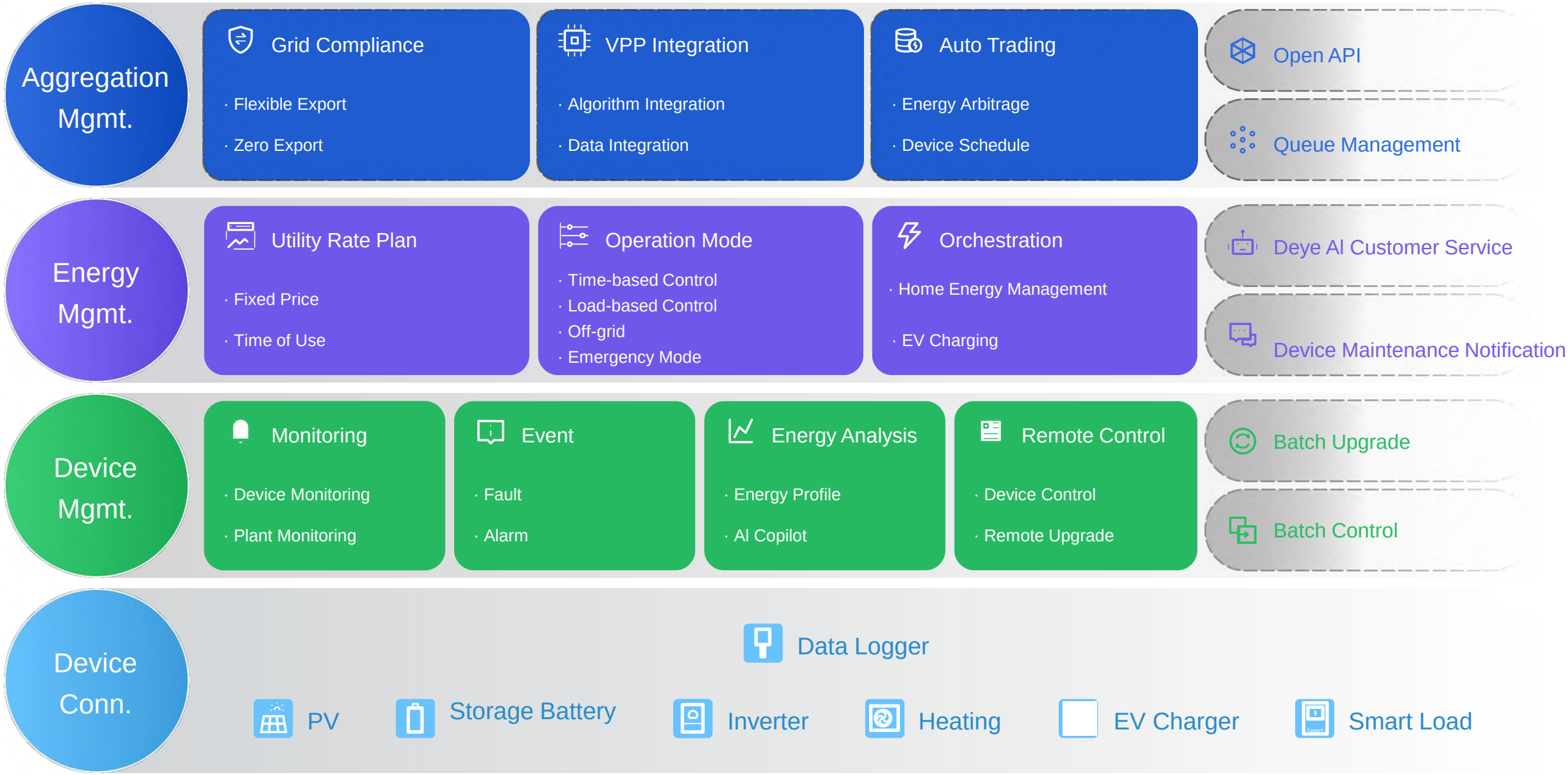
Utilize renewable energy sources primarily through energy - saving automation and dynamic tariff solutions

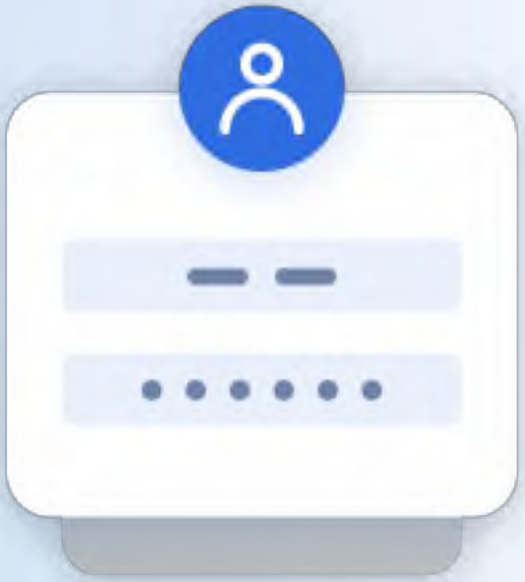
02

Product Architecture

2.1 Product Architecture Diagram

Product Architecture

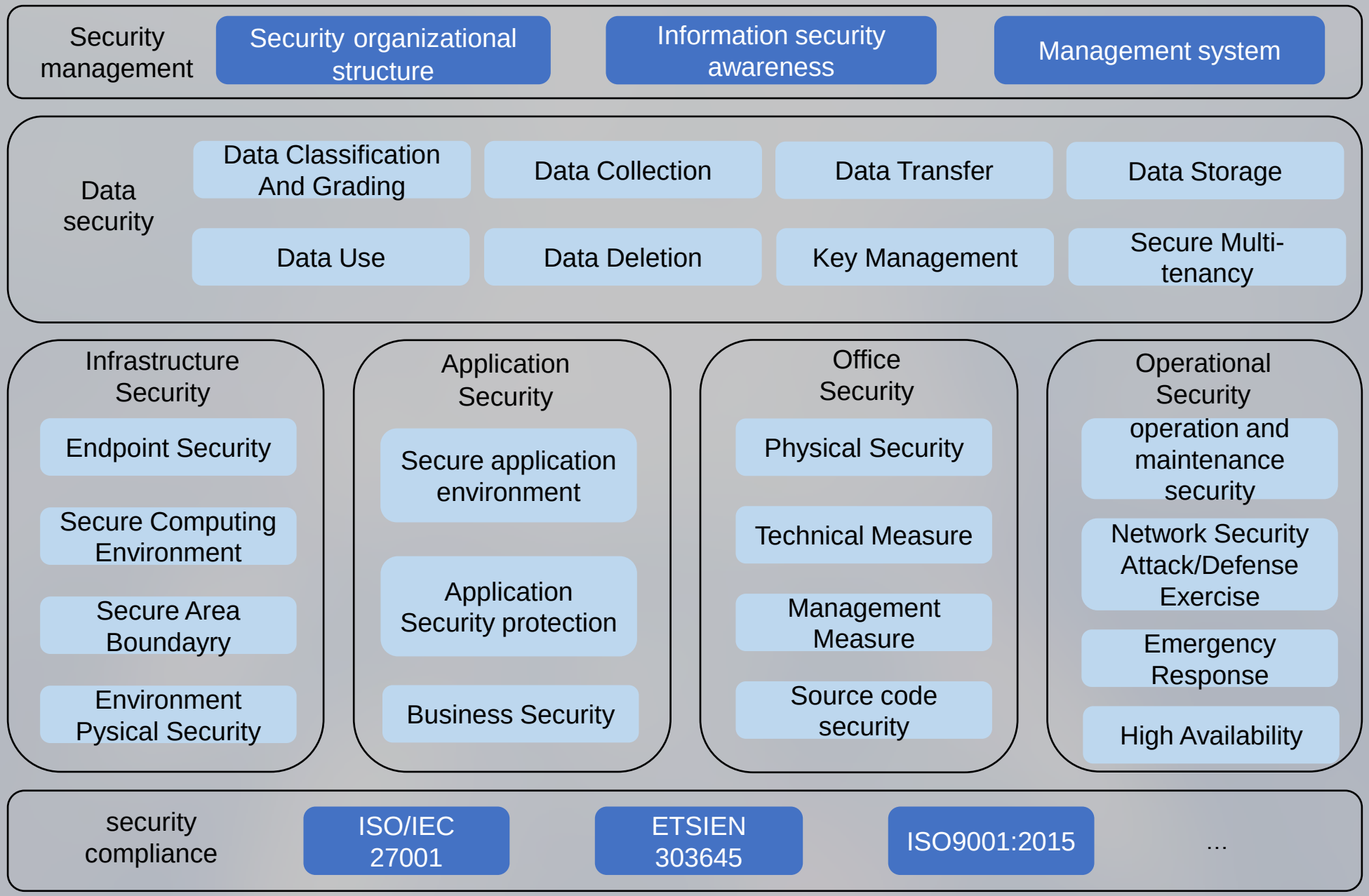




03

Information Security

3.1 Information Security


Security management
Security organizational structure
Information security awareness
Management system
Data security
Data Classification And Grading
Data Collection
Data Transfer
Data Storage
Data Use
Data Deletion
Key Management
Secure Multi-tenancy
Infrastructure Security
Endpoint Security
Secure Computing Environment
Secure Area Boundayry
Environment Pysical Security
Application Security
Secure application environment
Application Security protection
Business Security
Office Security
Physical Security
Technical Measure
Management Measure
Source code security
Operational Security
operation and maintenance security
Network Security Attack/Defense Exercise
Emergency Response
High Availability
security compliance
ISO/IEC 27001
ETSIEN 303645
ISO9001:2015
...

04

Algorithm Technology

4.1 AI Copilot Solution to Returns

Algorithm Technology

Based on the in-depth insight of factors like weather, power generation, home load and electricity price et c., VOLTHA products plus AI Copilot provide a smart and reliable solution to help you achieve more returns.

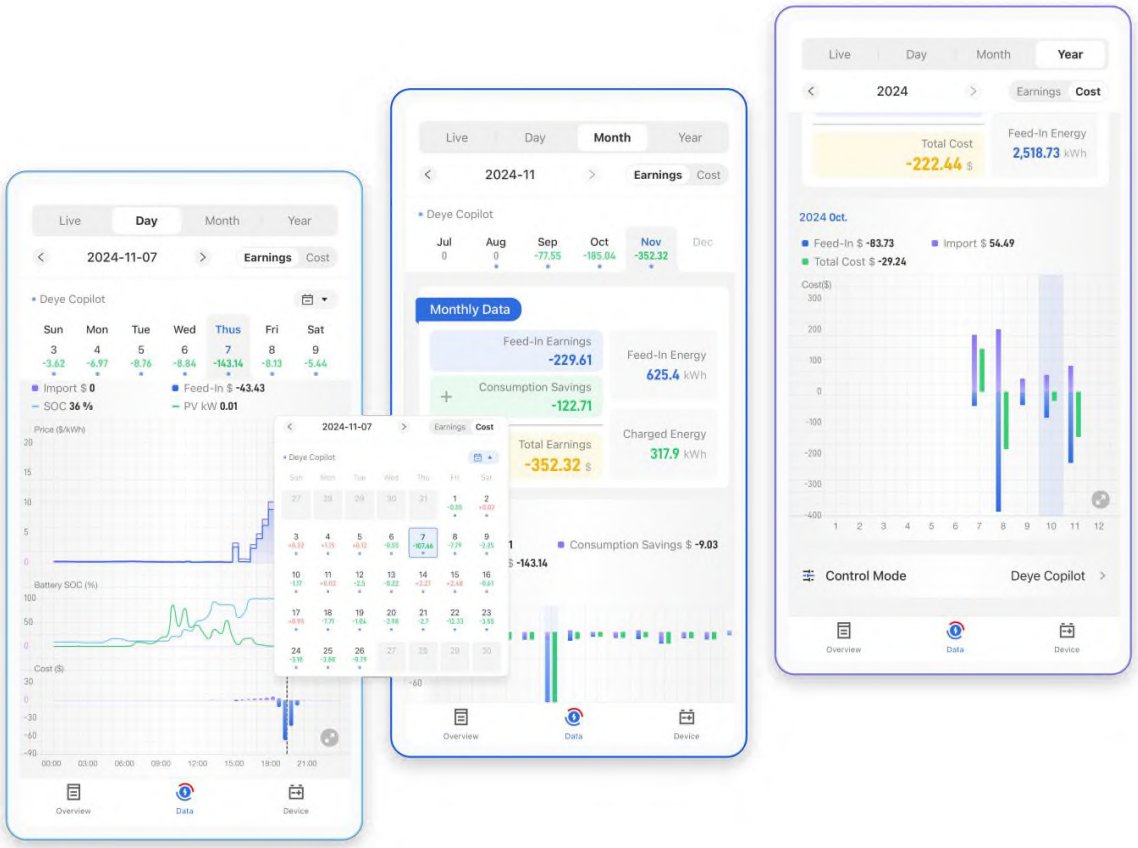
- Weather Forecast
- Power Generation Forecast
- Load Forecast
- Electricity Price Forecast
- Optimization Algorithms
- Machine Learning

Deye Solar inverter + Battery + AI Copilot = Max Returns

Algorithm Technology

AI Copilot

AI to help you discover new possibilities and expand your world



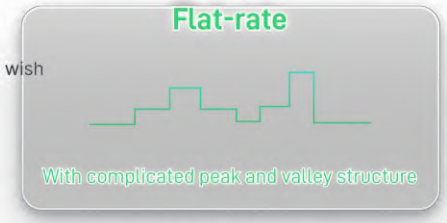
System Requirements

Both dynamic tariff and flat-rate are supported

Spot market live prices are automatically obtained

Choose your rate plan as you wish

or



Input your electricity plan and charges

05

Use Case

5.1 Use Case 1

5.2 Use Case 2

Use Case 1

24 KWp PV / 22 kWh Battery

Real value to customers proved. Potential of battery expansion detected.

Hourly import prices
Hourly feed-in prices

Deye Copilot

Feed-In Earnings ↑100%

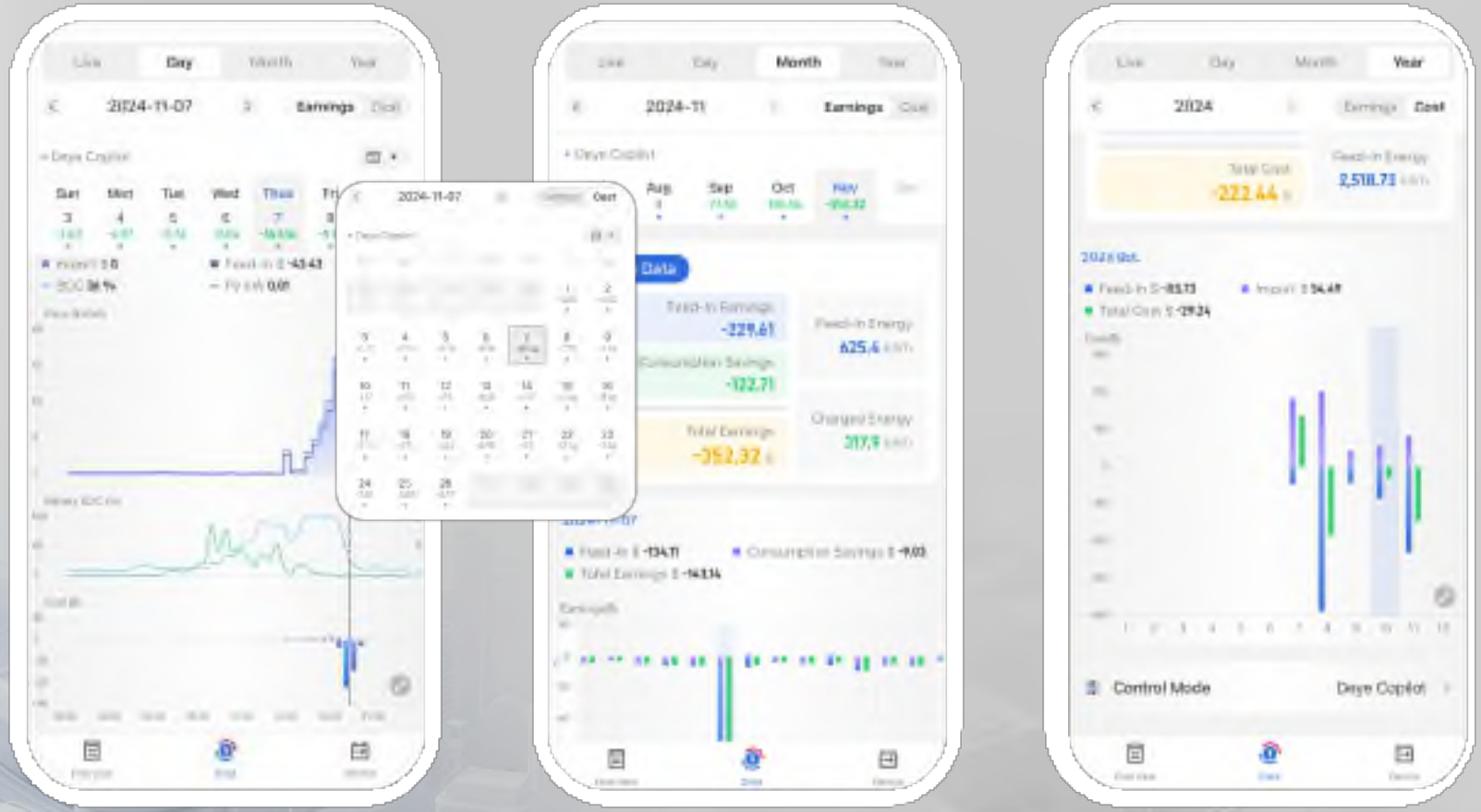
Monthly Billings ↓31.7%

Earnings calculated from 9-14 to 11-17

Use Case 2

24 KWp PV / 22 kWh Battery

Real value to customers proved. Potential of battery expansion detected.



Quarter hourly import prices

Quarter hourly feed-in prices

Deye Copilot

Daily Earning Up To

$275.01

vs. Grid Avg.

+500%

Earnings calculated from 8-31 to 11-26