

3-phase Hybrid



3-phase AC-coupled



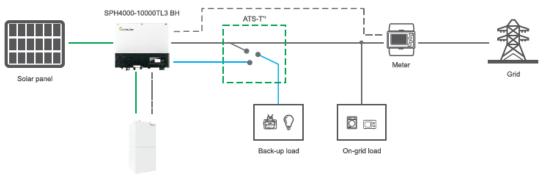
# 3-phase Storage Solution

# **Hybrid solution**

Battery cabinet

Perfect solution for new installation storage system

Maximize your solar self-consumption, reduce your electricity bills



#### What Growatt can offer:

SPH4000-10000TL3 BH

Meter (Standard)

ATS-T

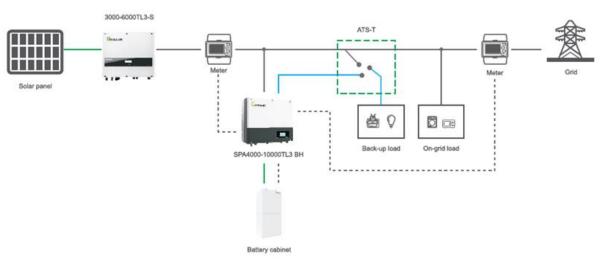
**Datalogger** 

ShineSever/ShinePhone



## **AC** coupled solution

Cost-effective solution for updating existing solar system to storage system Helps you to increase self-consumption and gain energy independence



#### What Growatt can offer:

SPA4000-10000TL3 BH

Meters

**Datalogger** 

APP

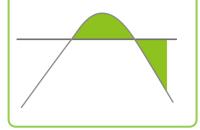
Note: meters metering import and output power to grid (Standard) Meter for PV production (Optional)



# Типові сценарії застосування

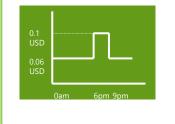
#### Максимізуйте самоспоживання

Краще максимізувати власне споживання акумулятором, коли ви продаєте електроенергію дешевше, ніж купуєте її



# Використовуйте багатоетапну ціну електроенергії

Заряджайте акумулятор за недооціненою ціною, щоб зберігати електроенергію та використовуйте її за піковою ціною, щоб зменшити рахунок електроенергії



#### Нульовий експорт

Контролюйте вихідну потужність сонячної системи, щоб уникнути подачі енергії назад до мережі



Note: only for hybrid inverter

# **Аварійне резервне** живлення

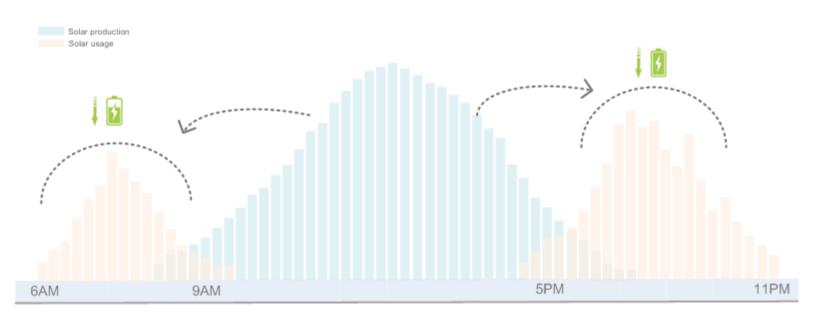
Розряджання, коли сітка замикається, працює як резервна потужність





# Schedulable the system how you want it working

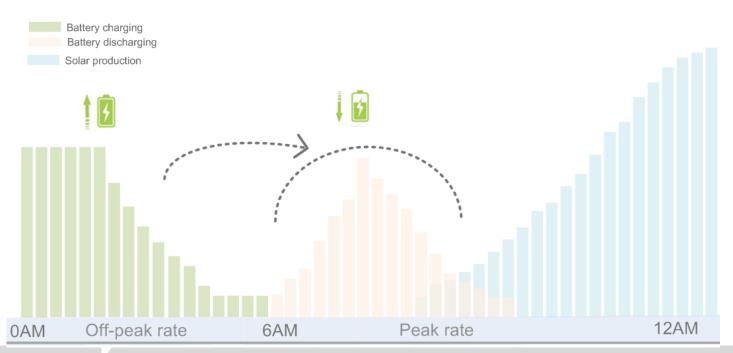
Storing solar power throughout the day, and use it at night, increase solar system self-consumption.





# Schedulable the system how you want it working

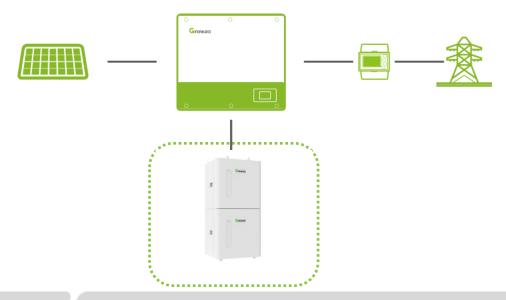
Storing energy when it is cheap and running your home with battery when rates go up.





# **Storage ready solution**

You decide whether to connect the battery at the time installation or retrofit it later Use it as a standard Grid-tie PV inverter, add battery whenever you need





# More choice for battery size

Enjoy more energy self-sufficiency with leading high voltage batteries Flexible capacity combine with module batteries. range 9.6kWh to 24kWh



#### **BMS Controller**

SC0500A-100S 4-7 batteries SC 1000-100S 8-10 batteries



**Battery Model: H48050** 



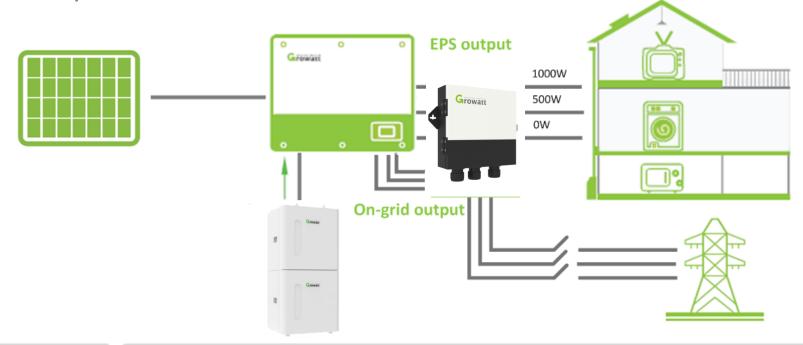
#### **Battery Cabinet**

2 Cabinets: BMS+ 4-7 batteries 3 Cabinets: BMS+ 8-10 batteries



# **Back-up function**

Work as back-up when blackout, 3 phase can be unbalance, max. output power is Pn/3 for each phase. Transfer switch: ATS-T.





#### IP20 & Fan cooling

**Problem :** Dust come inside because of static and fan, product failure rate increase, lifetime will reduce. Noise > 50dB



#### **IP65 & Natural cooling**

**Solution:** Waterproof and dustproof, better lifetime guarantee, less maintenance. Indoor and outdoor installation, Noise<35dB.



#### **Lighting Protection**

Type II SPD on DC and AC side for lighting protection



#### **Battery Management**

Smart battery management, ensure battery safety and lifetime, never over discharge.









LCD + Buttons
Easy to read and setting
via LCD + buttons

Local USB
Easy way for local FW
update with a standard USB
disk.



#### Convenient

# Showing real time data of your storage system







# Keep an eye on everything at all time via APP



Energy

Energy

Energy

Detriew

Unitable Today/Table

Solar production
4.3/4366.7

0/984.9

Energy production and consumption

2017-10-14

W

3342

1220

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

Solar Storage

Consumption

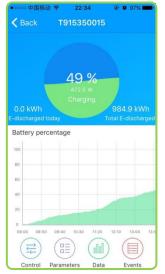
grid

Device

Energy

Service

Me





Real time data
upload.
System state at
a glance.
Lost data
continual
transfer after
recover.

**System state** 

**Power flow** 

**Battery state** 

**Energy statistics** 



# **Unique Online Smart Service system**



## **OSS** system

Mobile service platform, real-time online Q&A

OSS service system also open to professional distributors and installers for service

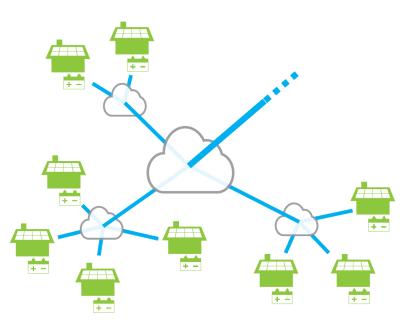
Remote FW updating and parameter setting, no need site travelling, saving service cost and time



# **Smart Grid Ready**

Growatt battery inverter are ready to work with smart grid

Grid operators can access Growatt storage system remotely and control them accordingly



#### **Benefits**

Homeowner

Self-sufficiency and benefit of sharing energy

**Grid operator** 

Grid stability enhanced by distributed energy producers



