## Smart Energy Management System Guidance

Smart energy management system(SEMS) is developed to monitor and control the Luxpower energy storage system. After the inverter installation and commissioning, we strongly recommend that you connect the inverter to the network to better know the real-time operation of the system and maintain it in time. Follow the steps below to get your account and finish WiFi/LAN connection, which will make your installation, connection, configuration and operation easier.

### 1. Control and Monitoring By Internet

#### Step 1: Register an account

1. If you use PC computer to register an account, please visit the web http://server.luxpowertek.com/WManage/web/login and click "Register".



2. You can also download "Luxpowerview" APP to register and monitor the system. Scan the two code bar below to get the APP. If you can not download the APP, please go to google store or apple store first, and search "Luxpower", you will find the APP.After download and install the app, you can begin to register

Andriod APP	IOS APP
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	* E-mail
	*Language English •
Password	Tel number
Remember username 🛛 🗹 Auto login	* Station name
LOGIN	* Nominal power(W)
	* Daylight saving time
	* Income formula(/kWh) RMB(¥) -
	* Continent Asia 👻
- or -	* Region East Asia 💌
	* Country China 👻
	* Timezone GMT +8 💌
	Address
REGISTER	* Customer code
WIELMODULE CONNECT	* Datalog serial number
	* PIN
(PRODUCT WARRANTY) (LOCAL CONNECT)	
Version 1.7.1	

- 3. When you register your account, you need to fill in the following information
  - a. Customer code: it is the code of distributor or installer, please contact the distributor or installer to get the customer code
  - b. Datalog serial number: the serial number is attached to the wifi/LAN shell.
  - c. PIN: PIN is attached to the wifi/LAN shell below the SN

 SN:BA18380113 ■ 5
 PIN: 864SS

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	* Daylight saving time	🔿 Yes 💿 No					
	* Income formula(/kWh)	Income formula(/kWh)	RMB(¥) V				
	* Continent	Asia	~				
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	* Timesone	-	~				
	Address	Address					
	* Customer code	Customer code					
	* Datalog serial number	Datalog serial number					
	* PIN	PIN					

4. For the distributor, please ask luxpower team to get the distributor account, for the installer, you can ask the distributor or luxpower team to get the installer account.

### Step 2: Set WIFI password for wifi module

Once you get the monitor account, you can start the WiFi module connection. Plug in the WiFi module to the communication interface on the bottom of the inverter as below.



When connecting for the first time, please set the password for the wifi module. There are two ways to make wifi password settings.

## 1. Use APP for quick password setting

- a. Install LXPView on your smartphone. Connect your smartphone to the wireless network that the wifi module needs to connect to, it means the phone and wifi module should be connected to the same wireless network.
- b. Open the app. Click on "WIFI MODULE CONNECT" and input your wireless network name and password

16:33 fall ♥ AB	1035000W/s 0 if all china: 40 ar china t 0 Call 86% LUS POWER <sup>TEX</sup> Set WIFI password to inverter WIFI module SSID: Your Wireless Network SSID Password: Your Wireless Network PSW START	10:35 0.000/ks Image: Chrina Top (0) (0) (0) (0) (0) (0) (0) (0) (0) (0)
Remember username Auto login	Please connect your mobile to the same router which your will module need to connect, then input password and click start,	Click when WIFI LED Flash Rapidly
— or —	Configure inverter WIFI module CONFIG WIFI MODULE FROM WEB Please connect your mobile phone to MCHIP, XXXXXX wifi networking first when wifi LED on wifi module is solid on, and then click CONFIG WIFI MODULE FROM WEB to config wifi module.	Configure inverter WIFI module CONFIG WIFI MODULE FROM WEB Please connect your mobile phone to MCHIP_XXXXXX wifi networking frat when wifi LED on wifi module is solid on, and then clack CONFIG WIFI MODULE FROM WEB to config wifi module.
REGISTER WIFI MODULE CONNECT PRODUCT WARRANTY LOCAL CONNECT Version 1.7.1		

- c. Power on the inverter and plug in the wifi module
- **d.** When the WIFI LED on the wifi module starts flashing rapidly, click the "Start" button as shown to set the password. Wait for about 10 seconds, the first green LED is always on, it means you set it successfully. Note that it must be clicked when the WIFI LED flashes **quickly, and otherwise it is invalid.**



After set password successfully, the Cloud LED of wifi will blink for about 2 minutes, and then it is solid on, which indicate that the wifi module has successfully connected to the wireless network. After 5 minutes, the INV LED of the WiFi module is always on, indicating that the wifi module and the inverter are successfully communicated. After 10 minutes, you can check the information about the system by website or APP.

Note: You do not need to log in to your account using the WIFI MODULE CONNECT function. After 10 minutes, if INV LED is solid on and Cloud LED is blink, it means the wifi module do not connect to wireless network successfully, please plug out wifi module and then plug in , and repeat the work from step (b).

## 2. Password setting via the Web

The steps to set a password via the web are as follows:

- a. Connect your mobile phone or laptop to the hotspot sent by the wifi module. The name of the hotspot is the same as the serial number on the wifi module shell.
- b. Power on the inverter. When the WIFI LED on the wifi module is solid on, enter 10.10.10.1 in the browser in PC, or Click "CONFIG MODULE FROM WEB" of APP. A dialog box for entering the user name and password will pop up. The username is admin and the password is admin.

c. After logging in, select English. Go to the "Station Mode Setting" page.

		흤 HD 🖏 💶 17:39
setting	)	$\odot$
MiCO		• 中文 English
Run State	AP State	
Wifi Mode Select	Eurotion	Enable
AP Mode Setting	IP	10.10.10.1
Station Mode Settling	Netmask	255.255.255.0
Uart Settinig	STA State	
Network Setting	Function	Enable
Moduel Management	Channel	6
gg	Signal Strength	-48 %
	IP	192.168.0.140
	Netmask	255.255.255.0
000	Gateway	192.168.0.1
	Command Mode State	
	Function	Disable
	Network 1 State	
	Function	Enable
	Protocol	TCP client
	TCP Client State	Connected
	Network 2 State	
	Function	Disable
	Protocol	无
	Run Time	853142 ms

d. Click on "Scan" and select the wifi network you want to connect to. Input wifi password, click "Save" .

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Run State Wifi Mode Select AP Mode Setting Station Mode Setting Uart Settinig Moduel Management	Station Parameter Setting SSID Encryption Mode Password IP Setting Auto IP Netmask Gateway Manage WiFi Net1 ssid Net2 ssid Net2 ssid Net2 ssid Net2 ssid Net3 ssid Net3 ssid Net3 ssid Net3 ssid Net4 key Net4 ssid Net4 ssid Net5 ssid Net5 ssid Net5 ssid Net5 ssid Net5 ssid	• 中文 English
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Run State Wifi Mode Select AP Mode Setting Station Mode Settting Uart Settinig Network Setting Moduel Management	Please select the wireless ne Select Name MXCHIP_138559 MXCHIP_138548 smile MXCHIP_138538 lucsun123456 ChinaNet-qxWY TP-LINK_HU CZWL-ZCDN ChinaNet-xsts	etwork you are currently using Rss -45% -48% -54% -67% -69% -73% -74% -75% -76%

e. After saving, restart the module.

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sett	ing	$\odot$
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Run State Wifi Mode Select AP Mode Setting	Parameter configuration success!	
Station Mode Settting	Reboot module to take effect whether to restart the module?	
Uart Settinig Network Setting Moduel Management		yes

Wait 10 minutes, when all LEDs on wifi are solid on, you can view the running data through web or APP. Please note if INV LED is solid on and Cloud LED is blink, it means the wifi module do not connect to wireless network successfully, please plug out wifi module and then plug in , and repeat the work from step (b)

For the LAN module, just plug in the module and connect the module to internet by cable, you do not have to set the password.

#### Step 3: Add a new power station or datalog

## 1. Add new power station

If you have more than one power station, you can enter the "Configuration" page, select "Station", and click "Add Station", then fill in the information and complete the power station addition.

	LUXPOWE	ER™					LuxInstaller Us	er Center 🛛 🛤	Logout
	Monitor	🖪 Data	• Configuration	M Overview	Maintain				
Stations -	+ Add Station	C					Search	by station name	<b>x</b> Q
- Datalogs	Plant name	EndUser	Solar PV Power(W)	Country	Timezone	Daylight saving tim Address	Create date	Action	
Inverters									
Users									
	30 ∨ H 4 Pag	e 0 of 0 🕨 🕨	0					Displaying	0 to 0 of 0 items

## 2. Add Datalog

If you have more than one inverter installed, follow the steps below to add a new datalog. Click "Configuration", "Datalogs", "Add Datalog" to add the datalo. Note that after the datalog is added, the inverter will be added automatically after it is connected.

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		LU <b>X</b> POW	ER™			LuxInstalle	r User Cente	er 👫	Logo	ut
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Stations		+ Add Datalog + In	nport Datalog				Search by datale	ig SN	×	٩
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Users										
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#### Step 4: Monitoring and setting

The function of the smart energy management system is mainly composed of the following parts:

a. Monitor: including real-time montoring and historical data uploaded from your system. The monitor parameter includes solar panel power, battery discharge power, load power, power feed into the grid, real-time operating status of the system. The system also counts the total power generation of the solar panel, the total discharge power of the battery, the total amount of power consumed by the load, and the total amount of electricity feed into the grid.

	O Monitor 🛛 🖾 Data	e Configuration	III Overview	Maintain			
Select plant first Home	5kw 🖌 8382005046	~					
Solar Yielding	<b>5.7</b> kWh Today Yielding <b>100.9</b> kWh Total Yielding	Battery Discharging	0.8 kWh Today Discharging 26.3 kWh Total Discharging	Feed-in Energy	0.1 kWh Today Export 3.6 kWh Total Export	Consumption	10.9 kWh Today Usage 316.4 kWh Total Usage
Realtime System Ini	formation	33 W PV Power		Normal		Site Information Solar PV 1 kW Inverter Hybrid 5.0kW Installation Date 2018-12-14	
396 W Discharge	Power	erser-		299 W Import Power			
60% soc							

b. Data: You can view detailed real-time and historical data of the system as well as event log information, and support exporting data in EXCEL format.

	Monitor	🛿 Data 🤚 Configuration 🔲 Overview 📓 Maintain
Chart •	Select plant first Ho	me 5kw V 8382005046 V C 2019-01-03 >
Energy	PV Side	SOC(%) - (8382005046, 2019-01-03)
History data	Vpv2(V)	150
Local data	Ppv1(W) Ppv2(W)	100
History event	Battery SOC(%)	50
	AC Side Vac(V) Qac(Var) Vepsr(V) Feps(V) Feps(VA) pTcGrid(V)	0 0 0 0 0 0 0 0 0 0

c. Configuration: User and plant management, you can add, edit or delete monitoring station, datalog and user information.



d. Maintain: Remote settings and system upgrades are available to make your system more convenient and efficient, maximizing revenue.

	💿 Monitor 🛛 Data 🤌 Configuration 🛤 Over	view 📱 Maintain
Remote Set 🛛 🗲	Select plant first Home 5kw 🔍 8382005046 🔍	
Remote Update	Common Setting	Read
	Time (?) yyyy-MM-dd HH:mm:ss Set	Com Addr [0, 150] Set
	PV Input Mode No PV Panel ~ Set	Start PV Volt(V) [90, 500] Set
	Set to Standby Start Standby	
	Application Setting	Read
	EPS Enable (?) Enable Disable	Run Without Grid Enable Enable Disable
	PV Grid Off Enable (?) Enable Disable	
	Feed-in Grid Enable Disable	Feed-in Grid Power Percent(%) [0, 100] Set
	Set Master or Slave (?) Phase 1 Master $\checkmark$ Set	Set Composed Phase (?)     Phase R     ✓     Clear Detected Phases     ✓     Set
	Micro-Grid Enable Enable Disable	Neutral Detect Enable Enable Disable
	Anti Island Enable Enable Disable	ISO Enable Enable Disable

#### e. Overview

To get the overview of all station and device



## 2. Control and monitor without internet

If you do not have internet in the station, there is another way to monitor the system in the station.

Step1, Connect your mobile phone to the hotspot sent by the wifi module. The name of the hotspot is the same as the serial number on the wifi module shell.

Step2, Open LuxpowerView and click "LOCAL CONNECT" After that, you can monitor and control the system.

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Username	$\sum$			
A password	$\mathbf{D}$			
Remember username 🛛 🖌 Auto login				
LOGIN				
— or —				
REGISTER	$\mathcal{I}$			
WIFI MODULE CONNECT				
PRODUCT WARRANTY	T			

Step3, If you can not open "LOCAL CONNECT" page(for the old module, you need to have step3, for the datalog manufactured after April 2019, you can skip step3), please go to web 10.10.10.1 and set server function as below,

(1) open browser and visit 10.10.10.1

(2) Choose network setting and Network connection2, change the setting to "TCP Server", and the Local port set to "8000"

#### (3) Save

after that repeat step2 and you can monitor the system locally.

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	☆	0	Loading		×
		Ider	ntity Verifica	tion	
	The server 10.10.10.1 requires a user name and passcode. Server hint: EMW3080B				
		Username			
		admin			8
		Password			
					8
					_
		Cancel		Sign in	
	<	>	Ξ	3	6

$\leftarrow$ $\rightarrow$ $\circlearrowright$ $\textcircled{o}$ 10.10.10.	1/index_en.html			□ ☆
			中文 English	
	Run State Wifi Mode Select	Network Connection 1 Setting		
	AP Mode Setting	Protocol	TCP Client 🗸	
	Station Mode Settling	Remote Port	4346	
	Station wode setting	Server Address(ip or domain)	120. 79. 53. 27	
	Uart Settinig			
	Network Setting		save	
	Moduel Management	Network Connection 2 Setting		
		Protocol	TCP Server 🗸	
		Local Port	8000	
			E AVO	

i 10.10.10.1/index\_en.html

# MiCO

Wifi Mode Select

Uart Settinig

Moduel Management

Run State

Parameter configuration success!

AP Mode Setting Station Mode Settting Network Setting

中文|English

Reboot module to take effect whether to restart the module?

